

CALIFORNIA - WESTERN AMERICANA

Santa Clara County Free Library



REFERENCE

R 917.3 M97

92757

E216

Murphy, T.D.
Three wonderlands
of the American west.

CALIFORNIA - WESTERN AMERICANA

Santa Clara County Free Library

California

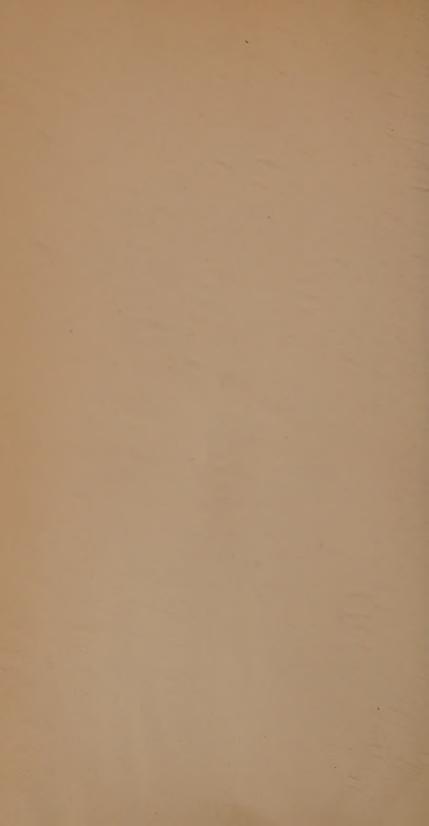
Alum Rock
Campbell
Cupertino
Gilroy
Los Altos (Main Woodland

Milpitas Calaveras Community Center Sunnyhills

Morgan Hill
Saratoga Cuito Village
Stanford-Escondido

Research Center-Cupertino
For Bookmobile Service, request schedule









SENTINEL ROCK THROUGH THE PINES, YOSEMITE PARK From the Original Painting by Thomas Moran, N. A.

THREE WONDERLANDS OF THE AMERICAN WEST

Being the notes of a traveler, concerning the Yellowstone Park, the Yosemite National Park, and the Grand Canyon of the Celorado River, with a chapter on other wonders of the Great American West

BY

Thos. D. Murphy

Author of "Oregon, The Picturesque," "On Sunset Highways," "On Old-World Highways," Etc.

With sixteen reproductions in color from original paintings by

Thomas Moran, N. A.

and thirty-two duogravures from photographs. Also maps of the Yellowstone, Yosemite, and Grand Canyon regions

NEW REVISED EDITION



THE PAGE COMPANY
PUBLISHERS



Copyright 1912

By THE PAGE COMPANY

All Rights Reserved

Fifth Impression, July, 1919

917.3 M97

Preface

My own case was perhaps a typical one; I had read in a desultory manner of the grandeur and beauty of our Western wonderlands, and had listened to what I thought the rather too highly colored encomiums of friends who had visited them. Photographs and illustrations of the scenery are common enough, but no adequate conception of vastness can be gained from a picture; it can convey little idea of the unmeasured absyms of these mountain vales and canyons, and of the fathomless blue heavens, pierced by titanic peaks, stretching away in distances suggestive of infinity. I was only languidly interested until it chanced my good fortune to see several original paintings by Thomas Moran, the wizard who comes nearer than anything excepting a personal visit in presenting to the eyes the true spirit of these wonderlands, and making one realize their glorious color and grandeur. I found myself wondering if it could

vii

Santa Clara County
Free Library
San Jose, Calif.

be possible that there was such an enchanted land as he portrays—such a land of weird mountains, crystal cataracts and emerald rivers, all glowing with a riot of color that seems more like an iridescent dream than a sober reality.

It may be on account of this very scepticism that thousands never see the most inspiring marvels of our own country. We question the fidelity of artist and word-painter, and spend our vacations in Europe or in some conventional resort hotel, while the great world of beauty and soul-stirring wonders of the American West remain undiscovered and unexplored so far as we are concerned. Or perhaps some are rather appalled at the vast distances they must cover by rail, and the discomforts—which prove more fanciful than real, after all—that they dread to undergo. Whatever the reason, there are but few thousands yearly who visit the Yellowstone, the Yosemite and the Grand Canyon, out of the millions who might find recreation and enjoyment in these virgin retreats of nature.

However, it is refreshing to observe that the hegira to the wilderness is on the increase. The man or woman who takes a vacation trip, as a rest and relaxation, is learning that these boons are hardly to be found in crowded cities and fashion-hampered hotels. For real restful-

ness one must get near to nature, out under the unsullied skies, among the mountains, with their painted crags, towering pines and leaping streams; it matters not how many fellow-pilgrims may be bound to the same destination, there is always the sense of solitude in these virgin wildernesses, and always nooks where one may be as much alone as he wishes. And this is pre-eminently true of the wonderlands which I shall endeavor to describe in whose bounds may be found perhaps a greater variety of strange natural phenomena and striking and beautiful scenery than in similar limits anywhere else in the entire world. So great are their dimensions that one is never crowded, even in the height of the season. The hotels and camps may be full, but the greatest number of visitors at any one time is but the merest handful in the pine-clad and rock-bound solitudes. Once away from the immediate vicinity of tent or inn, one may commune with nature quite alone and undisturbed

Acknowledgments are due to Mr. W. H. Simpson, of the Santa Fe Railway; to Mr. J. W. Stewart, of the Northern Pacific Railway; Mr. Chas S. Fee, of the Southern Pacific Railway; Mr. D. E. Burley, of the Oregon Short Line; the Pillsbury Picture Co., of Oakland, Calif., and Mr. F. J. Haynes, the well known photographer of St. Paul, for the photographs which I have reproduced in this book, and for other courtesies too numerous to mention. I am also under obligation to Messrs. Houghton, Mifflin & Co., of Boston, for the extensive quotation from John Muir's book, "Our National Parks," and to the Santa Fe Railway for numerous extracts from its various interesting publications. The copyrights of the original paintings by Thomas Moran, which are shown in this book, and which are reproduced by color photographic process, are owned by The Thos. D. Murphy Co., of Red Oak, Iowa, which concern controls all copyright privileges upon Mr. Moran's more recent pictures.

Contents

The Yellowstone

ī.	THE HIGHWAYS, THE CAMPS AND HOTELS	1
II.	NATURAL WONDERS OF THE PARK-THE GEYSERS	
		17
III.	NATURAL WONDERS OF THE PARK—THE LAKES	
		21
LV.	NATURAL WONDERS OF THE PARK—THE CANYON, MT. WASHBURN AND TOWER FALLS	00
77	THE FAUNA AND FLORA OF THE PARK	29
	THE HISTORY AND TRADITION OF THE PARK	
V 1.	THE HISTORI AND HADITON OF THE TARREST	10
	The Yosemite	
	The Tosennie	
I.	THE VALLEY AND THE MOUNTAINS	61
II.	UP GLACIER POINT TRAIL	69
III.	TO THE MARIPOSA GROVE	80
	THE RETURN TO EL PORTAL	
V.	GEOLOGY, HISTORY AND GENERAL INFORMATION16	01.
	mi a ia	
	The Grand Canyon	
	A FIRST GLIMPSE OF THE GRAND CANYON1	12
II.	DOWN BRIGHT ANGEL TRAIL	
	AT THE EL TOVAR	
IV.		
	CANYON15	39
V.	OTHER WONDERS OF THE CANYON REGION15	
	O.1 337 1 C.1 A + 337 - 107	
	Other Wonders of the American West 167	



ILLUSTRATIONS

Color Plates

SENTINEL ROCK THROUGH PINES, YOSEMITE
VALLEYFrontisplece
TOWER CREEK, YELLOWSTONE PARK 1
CANYON OF THE YELLOWSTONE RIVER 30
A PASSING SHOWER, CANYON OF THE YELLOWSTONE 32
CASCADE FALLS, YOSEMITE PARK 61
MORNING IN THE HIGH SIERRAS 96
THE INNER GORGE, GRAND CANYON113
A GLIMPSE OF THE GRAND CANYON116
BRIGHT ANGEL TRAIL, GRAND CANYON122
MIST AFTER RAIN, GRAND CANYON
ROCK TOWERS OF THE RIO VIRGIN, GRAND CANYON138
CLIFFS OF GREEN RIVER, UTAH140
MORNING, GRAND CANYON148
INDIANS BURNING POTTERY, LAGUNA, N. M160
TOLTEC GORGE, COLORADO167
SUNRISE ON RUINS AT CUERNAVACA, OLD MEXICO178
D.
Duogravures
OLD FAITHFUL INN, YELLOWSTONE PARK 10
ENTRANCE HALL, OLD FAITHFUL INN, YELLOWSTONE
PARK 12
OLD FAITHFUL GEYSER, YELLOWSTONE PARK 18
GIANT GEYSER, YELLOWSTONE PARK 21
RAPIDS ABOVE UPPER FALLS, YELLOWSTONE PARK 22
YELLOWSTONE LAKE FROM COLONIAL HOTEL, YELLOWSTONE PARK
GREAT FALLS FROM BELOW, YELLOWSTONE PARK 34
JUPITER TERRACE, YELLOWSTONE PARK
ROAD THROUGH GOLDEN GATE CANYON, YELLOW-
STONE PARK
BRIDAL VEIL MEADOW, YOSEMITE 62
BRIDAD VEID MEADOW, TORDELLE

EL CAPITAN, YOSEMITE
BRIDAL VEIL FALLS, YOSEMITE 66
YOSEMITE FALL, YOSEMITE
MIRROR LAKE, YOSEMITE
NEVADA FALLS, YOSEMITE 72
THE DOMES, YOSEMITE PARK
OVERHANGING ROCK, YOSEMITE 76
VERNAL FALLS, YOSEMITE 78
NEVADA FALLS, YOSEMITE 80
GRIZZLY GIANT," MARIPOSA GROVE 86
"VERMONT" AND "WAWONA," MARIPOSA GROVE 88
TWILIGHT, YOSEMITE101
A BRIGHT ANGEL TRAIL PARTY—GRAND CANYON126
VIEW FROM TERRACE, EL TOVAR, GRAND CANYON131
NEAR EL TOVAR, GRAND CANYON
THE INNER GROVE, GRAND CANYON
SUNSET, GRAND CANYON142
LOOKING NORTH FROM GRAND VIEW POINT,
GRAND CANYON144
SAN GABRIEL MISSION
CLOISTERS, CAPISTRANO MISSION
THE CEMETERY GARDEN, SANTA BARBARA MISSION174
MT. RAINIER-TACOMA REFLECTED IN SPANAWAY LAKE.176
2.4
Maps
YELLOWSTONE NATIONAL PARK
YOSEMITE NATIONAL PARK106
GRAND CANYON REGION164

The Yellowstone



The Yellowstone

I

THE HIGHWAYS, THE CAMPS AND HOTELS

The Government of the United States builded far better than it knew when by Act of Congress this wonderful region was set aside sacred from the ax of the woodman, the deadly rifle of the hunter, the shriek of the railway engine and the dash and dust of the motor car for "the benefit and enjoyment of the people." Like many another, I had queried, ere my visit, why the trip might not be shortened and made easier by the introduction of the trolley car or automobile, but the trip itself is the most sufficient answer. Enthusiast as I am for the winged wheels, I am glad they are banned and barred in Yellowstone Park. I rejoice that there is one spot still sacred to the old order of things—where you may have the solitude of the days of '49, where your coach-and-four rolls up to your inn as it did in the halcyon days of half a century ago, and where we may see the old-

time Wild West something as our fathers saw it. It may now be a rather subdued and conventionalized Wild West, it is true—the Indians with anything but hostile intent watching your train as it glides through the little stations on the way, forcibly reminding you of the different state of affairs, but vesterday, as it were, when you pass within full view of the melancholy rows of stones marking the site of Custer's last battle. The wild animals in the confines of the Park hardly deserve the adjective: when some timid deer looks mildly at you from among the trees, hardly caring to get out of your way, or when some big friendly brown bear sidles up to you and takes a morsel out of your hand you think rather of menagerie animals than denizens of the wild. How tame everything seems contrasted with the exploits of our childhood heroes in this same Wild West! And in the really excellent and in some cases unique hotels in the Park, one finds the very antithesis of the humble shack—more saloon than inn—that at rare intervals offered hospitality to the western wayfarer of olden days.

But in nothing has the change been more marked than in the system of transportation that has brought this once remote region to our

very doors. A day and two nights in a Pullman car, gliding over the splendid road-beds of the several west-bound railways, takes one from Chicago to the Yellowstone. If the Northern Pacific is chosen, one wakes in the morning to find himself at the beautiful and capacious Livingston station, and a ride of two or three hours along the rapid river brings the great arch of the Gardiner entrance in sight. Or, one may enter the Park from the west, coming by the Oregon Short Line. A day may be devoted to the sights of Salt Lake City-its famous temple and wonderful but rapidly vanishing lake—and the journey resumed at night. From Salt Lake City the trip to the Park may be comfortably made over night and the tour begun from the new Yellowstone Hotel the next morning. Either entrance will offer some advantage in the way of things to be seen and the plan of coming by one and leaving by the other is a good one.

If the Gardiner entrance be chosen, one traverses the highway between the station and Mammoth Hot Springs, six or seven miles of the most perfect road in the Park with much picturesque scenery on either side, before entering on the regulation round. On the other hand, the drive along the Madison River from Yellow-

stone Station to Fountain Hotel is one that the tourist cannot afford to miss, and unless he has some very special reason for returning by the route over which he comes, he certainly should choose the other. If he must return over the same road, the two routes are so nearly identical in advantages that the matter of personal convenience may well be allowed to influence one's decision as to which to adopt. It should also be borne in mind that in taking both routes one has the opportunity of seeing a much wider scope of country on his journey to and from the Park.

The regulation trip by the way of Gardiner comprises about one hundred and fifty-eight miles and the average of the roadway is surprisingly good. The whole route has been skillfully chosen by government engineers, and considering the difficult and mountainous nature of the country is exceptionally free from steep grades. In course of the last few years the road has been greatly improved; it has many fine stretches of macadam and while portions of it are as yet in rather poor condition, these are always passable on account of the nature of the soil, which does not cut up into deep mud in the wet weather not uncommon in the Yellowstone; but on the other hand, it may be distressingly

dusty during the longer dry spells. The government representatives have done much to overcome this by installing a sprinkler-cart service, which at present covers about twothirds of the route and is being constantly extended. The numerous streams furnish a ready supply of water, which is elevated by hydraulic rams into the tanks at the roadside. There is vet much to be done to put a large part of the road into first-class condition, especially the twenty-mile stretch from Thumb Station to Lake Hotel, and about fifteen miles from the Canyon to Norris Basin. The former, rough, hilly and often terribly dusty, may be avoided by taking the lake steamer, which is to be recommended though the extra fare is high for the distance; the latter road is quite new and work upon it is still in progress, so its early betterment may be looked for. It chances, fortunately that these two pieces of road are the least interesting of the entire route; one misses little and gains much in scenic beauty by taking the lake boat, and as for the trip from the Canyon to Norris, he must endure as best he may the stifling dust and the jolting and pitching of the coach into the chuck-holes which abound. The finest bit of road in the Park is the six or seven

miles from Gardiner to Mammoth Hot Springs, quite as excellent as one will find anywhere, and it is to be hoped that at some not very distant day the whole route may equal this splendid little stretch. Then the motor car might come—but the motor car has no business in Yellowstone Park. Taking it altogether, while the road yet admits of much improvement, the journey may be accomplished with little fatigue by anyone who is a fair traveler, and those who rather enjoy the strenuous life may have just as much of "roughing it" as they elect.

This suggests the consideration of the various ways in which the round of the Park itself may be made, and one has the choice of three well-established methods. He may make the round in a minimum of six days by the coaches of either of the two transportation companies, stopping at the splendid hotels for the nights; if fond of outdoor life, he may avail himself of the services of any one of the several camping companies, of which the Wylie Permanent Camps are best known; or he may go quite independent of all these, for camping outfits may be rented at Livingston, Gardiner or Yellowstone in great variety, with wide range in style and price. Guides and cooks may easily be secured, and the

tour made in strict privacy and prolonged to suit the convenience of the party—for, of course, such an arrangement is practicable only in case of a party of several people. The latter plan affords an ideal summer vacation and if we may judge from the enthusiasm of those who have adopted it, it is without doubt the most delightful way of doing the Yellowstone. But it would hardly be worth while to go to the trouble which it entails for a period of less than two or three weeks and for that reason this method will never be pursued by the great majority of Park visitors.

Perhaps about an equal number go by the hotel and the regular camping routes; the former is a little more expensive, and appeals to the traveler who dislikes the slight inconveniences of a canvas tent bedroom. Generally speaking, the hotels may also be preferred by the more elderly and less vigorous tourists, but the motives will be less so diverse that generalization is scarcely possible. The permanent camps are charmingly located, often in pine forests by lake or river; they are clean, the sanitation is good, and many of the tents afford the privacy and convenience of the ordinary hotel bedroom; they are heated by small wood stoves in which the

attendants build fires before the tourists rise. There is more freedom and hilarity than in the hotels and the camping parties perhaps enjoy themselves more thoroughly than the hotel guests, but this would be natural, for they have a larger proportion of young people.

The comfort and conveniences of the hotels have been so carefully looked after that even the experienced traveler will be surprised at the excellence of the service. These remote inns will compare very favorably with the best resort hotels of the East, and despite the disadvantages they suffer by bringing their supplies so far by wagon, the bill-of-fare is excellent in quality and variety. Almost every convenience is supplied and the more modern of the hotels have numerous rooms with bath in connection. Everything is quite informal and comfortable. One may take his ease at his inn. as desired by the Shakespearian worthy. The notion that an extensive wardrobe must be carried by the tourist who stops at the hotels is a delusion; no one "dresses for dinner." I did not see a single "dress suit" during my round and I doubt if there were any in the Park. People were just plain, everyday American citizens, our own party comprising a schoolteacher and

8

her friend, a country banker, a circuit judge and his niece, an eastern manufacturer and his wife —but it is not necessary to extend the list: the little given is representative enough. Such people are not to be hampered by any undue formality and it is hardly necessary to state that the readily formed acquaintances are not the least pleasant feature of the tour. The regulation Concord coach of the transportation companies carries eleven passengers besides the driver, but there are many other conveyances carrying four or more. Parties as far as possible are made up in accordance with the wishes of the members, but we found it quite satisfactory to take our chances in the allotment of our party, and the pleasant acquaintances formed during the five days' jaunt fully justified our course. And I do not doubt that had our lot fallen with any other coach the result would have been quite the same. One doesn't chance it very much in the company of the average Yellowstone tourist. We thought ourselves fortunate that our party included a pleasant old gentleman-somewhat talkative and self-opinionated, it is true, but an old-time mining and railroad promoter in the mountains, possessed of a wide fund of knowledge of the West, its fauna, flora and history.

But for him we should often have missed the flowers, shrubbery, berries, strange trees and animals that abound in the Park. At every pause he brought to our attention something of the kind he had discovered which a less practiced eye must have overlooked. Besides, he had a fund of stories and a ready wit which did much to entertain the party.

But I am digressing from my topic—the Park hotels—and one of them is so remarkable as to deserve extended mention, and an extended stay if one's time permits. Its like is hardly to be found elsewhere—the El Toyar at the Grand Canvon may resemble, but can hardly compare with it. For the Old Faithful Inn is quite as unique as the wonderland in which it stands. It is distinctly a product of the wilderness which surrounds it. Its design and construction are peculiarly appropriate to its location in the heart of the mountains and forests of the Park, from which the materials were drawn. Massive, unhewn forest trees, rough boulders and undressed slabs are happily co-ordinated in the great structure, and everywhere gnarled, twisted branches —the strangest ever seen—have been fitted into some appropriate place, forming supports for the over-hanging gables, the balconies and numer-

10



OLD FAITHFUL INN, YELLOWSTONE PARK Courtesy Northern Pacific Railway



ous dormer windows. The entrance hall is seventy-five feet square, and rises ninety-two feet through the center to the rough timbers of the roof. In the midst is the immense stone chimnev, fourteen feet square, with four great fireplaces, each of which can take a good-sized log in its capacious maw, and against its front is fastened a monstrous wrought iron skeleton clock, whose massive weights have a drop of perhaps thirty feet. The huge main entrance and dining-room doors are of solid oaken planks studded with heavy bolts and swung on great hand-wrought iron hinges. On the second and third floors rustic balconies surround the entrance hall, affording a pleasant promenade for the guests, and the bare slabs of the roof are visible at the top. There is a fine veranda in front with many cozy chairs, settees and rustic swings, from which one may watch the steam. ing basin and get a perfect view of Old Faithful in action

Yet with all this rusticity, comfort, convenience and even elegance are everywhere. The polished hardwood floors are strewn with oriental rugs and the furniture is of mission pattern in dark weathered oak. The windows are of heavy plate glass in leaded panes and the fur-

nishings of the bed and bathrooms are of the best. Yet the rustic idea is carefully maintained; even in the private rooms the walls are of rough planks or ax-dressed slabs and everything is redolent with the fragrance of the mountain pine. Verily, this inn is a pleasant place, set down as it is in a weird, enchanted land. One may leave its doors to view the suroundings, in charge of the Swiss guide, Joe, who for a dozen or more years has piloted the gaping crowds of pilgrims about this seething, spouting geyserland. And the quaint humor of his dry jokes is none the less amusing to you because he is cracking them for the thousandth time.

Here is the very center of the active phenomena of the Park. Nowhere else are the geysers so plentiful, so varied or so beautiful. The queen of them all in beauty, symmetry and reliability is Old Faithful, which very appropriately gives its name to the inn. Every hour, day and night, summer and winter, this great white column of water and shining vapor spouts high into the heavens. There are others larger and which rise higher, but their intervals are very irregular and often of rare occurrence, and were it not for the rightly designated Old Faithful, many tourists would go through the Park



ENTRANCE HALL, OLD FAITHFUL INN, YELLOWSTONE PARK Courtesy F. J. Haynes



without seeing a really representative geyser in action.

The region around Old Faithful, known as Upper Gevser Basin, has many attractions aside from the gevsers themselves. One will linger long to admire the crystal river that glides through the valley like molten diamond over its bed of mossy stones and to watch the schools of mountain trout that dart hither and thither through the bright water quite regardless of vour presence. Then there are Emerald Pool and Morning-Glory Spring, two of the most remarkable natural phenomena of the Park. The first is a lakelet of the most delicate emerald green, its waters themselves as clear as crystal but taking their tint from the bottom of the pool, giving a wonderful effect of purity and transparency. The water is just below the boiling temperature, and apparently of great depth. The Morning-Glory Spring, whose marked resemblance in shape to that flower gives it the name, is easily the most beautiful of the numerous hot springs of the Park. Its sides, following the contour of a giant morning-glory, slope away to a great depth, and reflect the hues of a thousand gems into the clear water that fills the spring. Turquois, emerald, jasper, amethyst,

amber and lapis lazuli seem to lend their multifarious colors to the walls of the spring, combining to produce an effect indescribably beautiful. And yet much as one may admire and enjoy all this weird beauty, he is never wholly free from a sense of uneasiness as he walks over the firefretted ground and feels beneath his tread a certain uncanny hollowness, and the tale the guides often tell about the breaking out of a new geyser comes unpleasantly to mind. For at Norris Basin a short time ago a terrific eruption took place, resulting in the formation of a new geyser. A loud report was heard and heavy stones were hurled hundreds of feet-but shortly after a party had left the spot. A little disquieting, but, after all, no one of the hundreds of thousands who have gone through Yellowstone Park has ever been injured by such a catastrophe. Clearly, there is enough about Old Faithful, aside from the pleasant inn itself. to tempt anyone whose time permits to linger much longer than the few hours allowed by the regular tour; but those who must hasten on will carry away with them an ineffaceable recollection of the unique hotel and its strange surroundings.

Decidedly more conventional, but quite equal in appointment and comfort to Old Faithful Inn. is the Lake Hotel, some forty miles farther on the road. It was built but a few years ago and is styled the Colonial on account of its massive colonnades fronting on the lake. Standing as it does in the edge of a stately pine forest and commanding a most picturesque view of the lake and mountains, its situation is a superb one. In the woods near at hand our naturalist friend found wild strawberries and called our attention to the tiny shrubs loaded with huckleberries. Here, too, a great colony of bears is often seen and at evening they congregate in a nearby open space in the woods to await the hotel garbage wagon. They are very mild, harmless mendicants, though at times they may show flashes of ill nature towards each other. They are always a great attraction for the hotel guests, some of whom are quite willing to miss a meal to watch the ungainly antics of the brutes. The Lake Hotel is in the center of the fishing district and the devotee of the sport will find a veritable paradise at hand. Even the novice is sure of a catch and the skilled fisherman almost deprecates the eagerness of the Yellowstone Lake trout to take the bait. The

most favored fishing grounds are near the outlet of the lake, though one is sure of success almost everywhere. The principal catch is lake trout, some of which attain considerable size. The tourist with several days at his disposal in the Park and who prefers the convenience of the hotel to camping, will no doubt give the greater portion of his time to the Colonial.

The Mammoth Hot Springs and Fountain Hotels are older and hardly comparable to the two I have described, though the service is much the same. The old Canyon Hotel was much the poorest of the five, but since the time of our visit a new one has been built more in keeping with the magnificent surroundings.

The new hotel is quite as distinctive in its way as the Old Faithful Inn or the Lake Colonial Hotel. The most unique feature is the "lounge," one hundred and seventy-five feet by eighty-four feet in size, with open timber roof. It projects from the main building towards the canyon and a splendid view of the great gorge may be had from the windows. It is a matter of congratulation that the canyon region at last has a hotel in harmony with the superb situation, and the new inn will no doubt be one of the most popular in the Park.

NATURAL WONDERS OF THE PARK—THE GEYSERS AND HOT SPRINGS

I am in no sense attempting a guide book, and shall make no effort to follow the regulation tour in sequence. It shall be my aim to note but a few of the most remarkable phenomena of the Park and to endeavor to record some of the impressions its weird beauty and magnificence made upon my own mind. I cannot but feel that anyone who does something, though it be but little, towards disseminating a wider knowledge of this untrammeled playground of the nation, is doing a commendable act.

Doubtless the most distinctive feature of Yellowstone Park is its geysers—those strange, boiling, spouting springs, hot, highly colored pools, mud caldrons, paint pots, or whatever form they may take. In this regard the region is almost unique, for while geysers are found in Iceland, they do not compare with those of the Yellowstone region, and are, moreover, quite

inaccessible to the average tourist. Not only is the geyser interesting as a strange natural phenomenon, but it is often so gloriously beautiful as to make a long journey to witness it well worth the while. And when one finds such a remarkable group in immediate connection with many other strange and delightful natural phenomena as in Yellowstone Park, the combination is indeed a rare one.

Various theories have been advanced to account for geyser action, but all have finally been abandoned in favor of that of Bunsen. He considers that the Yellowstone region is of volcanic origin and of comparatively recent date, though it may be millions of years old, for that matter. There are masses of heated rock near the surface and in these are numerous fissures through which the waters of Yellowstone Lake find their way. When the steam thus generated beneath the water rises to a sufficient pressure it ejects the column above it, following in dense clouds. The intervals vary according to the time required to fill the tube and generate the steam, and should depend much on the size and shape of the subterranean cavity. Where the circulation of the water is unhindered, a simple hot spring or pool will result, and these are more



OLD FAITHFUL GEYSER, YELLOWSTONE PARK Courtesy Northern Pacific Railway

numerous than the spouting geysers. From the very nature of geyser action, it is easy to see that under favorable conditions it may cease at any time or may break out in new places, as previously related. In 1888 the Excelsior Geyser—once the greatest and most spectacular in the Park—ceased to act.

Old Faithful may be taken as typical of the Yellowstone geysers—which I have no intension of cataloguing and describing in detail. It is within a few hundred yards of the hotel and may be viewed to advantage from an easy chair on the veranda. Every sixty-five minutes, with but trifling variation, this great white column rises from one to two hundred feet in the air. with a duration of four or five minutes. The appearance is greatly varied by weather conditions and differs much according to the hour of the day, thus presenting new beauties at almost every eruption. Sunrise, sunset, moonlight, wind and storm, all gild with various hues or sway the great steaming column into a thousand fantastic forms. When the geyser is quiescent one may approach the crater, an oblong opening about two by six feet, with a quiet pool of crystal clear water. Some say that the deposits around the crater indicate an age of tens if not

hundreds of thousands of years. And bearing this fact in mind, one will experience a strange sensation as he gazes on this weird intermittent fountain, justly considered one of the gems of the wonderland. When Columbus discovered America this great white column at regular intervals was playing and glittering in the primal solitude: when Lief Erickson landed it was unspeakably old, but glorious as ever; when Christ was on earth its strange beauty fell on the eve of the infrequent savage who gazed on it with a superstitious awe; long before the reputed date of the creation it played and coruscated in the sunlight; before man himself trod the earth Old Faithful, robed in showers of diamonds and the glories of the rainbow, rose and fell with none to see and admire. And thinking of its immeasurable age, one is led to hope that for countless centuries to come this beautiful natural phenomenon may continue to play to the delight and admiration of millions yet unhorn



GIANT GEYSER, YELLOWSTONE PARK Courtesy F. J. Haynes



Ш

NATURAL WONDERS OF THE PARK—THE LAKES AND RIVER

Next to geyser action in its myriad forms, the rivers and lakes of the Yellowstone will delight the visitor. There are none more beautiful in the whole world: the pure, limpid waters, the swift green and crystal rapids, the glorious foam-clad, rainbow-hued falls and the magnificent setting of natural scenery are altogether unmatched. The panorama, as one gazes up the great painted chasm of the canyon with the green foam-flecked Yellowstone writhing through it, ending in two of the most glorious cataracts on earth, has altogether nothing to compare with it; the canyon of the Colorado is as brilliant and vaster, but its dark, sand-laden river is no match for the emerald flood of the Yellowstone. The whole course of the river from Livingston to its source in the lake is one of constant beauty, which is probably at its height about the last of June, when the floods

of the melting snows swell the stream. For twenty miles after leaving the lake the water lies in broad lazy reaches, as though it were resting for the awful turmoil before it, and its banks are beautifully diversified with open glades and majestic trees. One might float unhindered from the lake to the canvon with little to prepare him for the tremendous leap that the river makes to the bottom of the great many-colored gorge that awaits it. A sheer fall of three hundred and sixty feet is quickly followed by a second more than half as high, after which the vexed stream bounds madly onward between the variegated walls on either hand. and from thence until it joins the Missouri it has little of rest or quiet.

The Firehole River, which the road follows for many miles, is picturesque, though it lacks the stupendous scenery of the Yellowstone. It is swift, crystal clear, and in places of considerable volume. It flows westward from the continental divide and its waters finally merge into those of the Columbia. Along its shores are many delightful camping sites, and the river runs directly through the group of geysers at Upper Basin. In fact, at this point the temperature is noticeably raised by the volume of water



RAPIDS ABOVE UPPER FALLS, YELLOWSTONE PARK Courtesy F. J. Haynes



poured into it from the geysers and hot springs along its course. Immediately on its bank near the picturesque bridge where the road crosses is one of the most beautiful of the geysers in the Upper Basin group—the Riverside, which discharges its waters at an angle of about forty-five degrees, the only one that varies much from the vertical.

There are many minor streams, all of which exhibit much the same characteristics. The road follows the Gibbon River some miles, crossing it several times. It rather lacks the beauty of its sister streams, though many of its falls and cascades form pretty bits of scenery.

But the glory of the Park is Yellowstone Lake, a splendid sheet of clear water covering about one hundred and fifty square miles. It lies 7,741 feet above the level of the sea, girt by majestic mountains and usually reflecting a serene, cloudless sky. The waters are light-green in color tone and are permeated by myriads of tiny crystal bubbles that rise from the multitude of hot springs which flow into the bottom of the lake. We were so fortunate as to secure seats in the bow of the launch that takes one from Thumb Station to Lake Hotel, and from this point of vantage an entrancing

view presented itself. Coming out into the main body of the lake, we sailed toward the great Absaroka Range, which flings its fanciful peaks high into the northeastern heavens, on that day intensely blue with an occasional snowy cloud drifting lazily along. It takes a stretch of imagination, perhaps, to see the Sleeping Giant or the Cathedral Spires among the stern shapes that lie silhouetted against the horizon, but with a little aid from the mariner at the wheel you descry them and the resemblance grows as you glide toward them. Still farther to the right lies the lofty Sheridan Range, with patches of snow still flecking the forest-clad slopes. Whichever way one turns he is confronted by a panorama of dancing sunlit water stretching away to pine-clad shores and distant mountain peaks.

Soon there looms up against a background of somber pines, the long yellow facade of the Lake Hotel with its massive overhanging gables upheld by great Corinthian pillars. We find it a very pleasant inn, its spacious lobby rich in mahogany and the polished floors strewn with oriental rugs. It fronts directly on the lake and a long row of comfortable chairs invites us to enjoy the splendid prospect at our ease. And

indeed, so soon as his name is on the register, one hastens to the ample terrace in front of the hotel, where he may sit and silently admire the glorious sheet of water that stretches away toward the mountain ranges beyond—their summits glowing in the declining sun.

I doubt if there is a finer bit of water on this mundane sphere. We have seen the Scotch. Swiss, Italian and Adirondack lakes, but all of them lack something of the indefinable charm and weird beauty of Yellowstone Lake on such an evening as this. Perhaps its very loneliness and remoteness lend not a little to the sentiment that o'ermasters one. What a fit setting this virgin wilderness, far from the hum of cities and sacred from the huntsman's gun, forms for it! The pelican, winging his way directly over the rowboats, unscared, and a flock of wild ducks floating vonder within a stone's throw from where you sit, give you a sense of strangeness. Elsewhere one may not find these shy wild things so careless of man's presence—and what tells them they are safe?

But the evening advances; the lengthening shadows sweep over the bright waters which glow mysteriously beneath the opalescent skies. Momentarily the colors change; amber—ame-

thyst-sapphire-seem to prevail in turn: then the glow fades from the rippling surface, which becomes a deep steel-blue mirror for the mountains and stars. But we are indeed favored tonight—a copper-colored moon is peeping over the eastern peaks; it gains in radiance as it ascends the heavens and flings a long streak of fire across the dancing wavelets. The whole scene is transformed as by enchantment; the mountains become weird pyramids and towers, vast, ill defined and unreal; the somber pines hide unimaginable mysteries; every nook and cranny of the sinuous shore line is peopled with ghostly inhabitants; one becomes oblivious of the inn and his fellow-beings and imagines himself the first human being who has ever beheld the entrancing scene. He beholds Yellowstone Lake, virginal, undiscovered, alone—in the heart of an unknown wonderland.

But I awaken to the fact that I am quite alone in my contemplation of the glories of the sunset and moonrise on the lake; except for a few stragglers the guests have disappeared. A dozen or more bears in the grove to the rear of the hotel have proven a greater drawing card than the scene which inspires my ecstacies—and I may as well plead guilty myself to giving a



YELLOWSTONE LAKE FROM COLONIAL HOTEL, YELLOWSTONE PARK Courtesy Northern Pacific Railway

good part of the evening to watching the antics of these uncouth denizens of the Park.

There are other fine lakes in the vicinity, though much smaller and not on the regular route of travel. Shoshone, Lewis and Heart Lakes are of considerable size—like perfect gems set in the encircling hills. From Teton Point the tourist gets a fine view of Shoshone Lake. It is about seven miles long and from one to three in width. Its shores are most picturesque and a rather rough road leads around it from Upper Basin, passing through a group of geysers at the western end of the lake.

The drive from Lake Hotel to the canyon takes one through as peaceful and quiet a bit of landscape as may be found in the Park. The weird mud volcano, some fifty feet in diameter, a great seething caldron of boiling mud, uncanny and malodorous, is the only notable evidence of geyser action in the twenty miles; there are no startling phenomena aside from this along the way. Just a splendid road with easy grades leading through a wide grassy valley along a tranquil shining river resting in broad quiet reaches and giving no hint of the awful fury just beyond. From our seat beside the driver—it was our turn to occupy this coveted position—we

had a splendid view of river and valley and the grass-covered hillocks brought sharply to mind bits of country we had seen in the Scotch Highlands.

But one's interest in this quiet valley is quite overshadowed by his eager anticipation of the wonders soon to come. We have read so much, heard so much, and have seen such marvelous photographs and pictures of the Canvon and Falls of the Yellowstone that expectation is roused to the highest pitch. We wonder if we shall be disappointed; whether the reality will be less than the word-painting of Kipling and the canvas of Thomas Moran. canyon such a marvel of color as they tell us. and are the river and its falls so overwhelming in grandeur and beauty as descriptions have made them? It is with eager anticipation that we await the testimony of our own eves concerning the marvels of Yellowstone Canvon.

IV

NATURAL WONDERS OF THE PARK—THE CANYON, MT. WASHBURN AND TOWER FALLS

The old Canyon Hotel, standing on an eminence overlooking the valley, was rather the shabbiest and least satisfactory of the quintet. Perhaps the builders of the hotel considered that the exhilarating glories of the scenery were sufficient to atone for any lack of bodily com-The old building, however, has been replaced since the time of our visit by the palatial structure already alluded to, which is said to even surpass the Lake Hotel in size and appointment. But I would not intimate that the old Canvon Hotel was uncomfortable: perhaps it suffered rather in the minds of those who had just sojourned at the Lake Hotel and Old Faithful Inn. We arrived in time for luncheon and though we craned our necks for a sight of the canyon, we had no more than fugitive glimpses of the river through the trees.

We realized later that we were fortunate in not seeing the canyon piecemeal; the view from Inspiration Point is far more impressive and overwhelming in its grandeur coming as it does when one is quite unprepared for it. A three-mile walk or drive from the hotel through thickly standing pine trees takes one to this famous viewpoint. A substantial platform surrounded by a rustic balustrade extends over the edge of the canyon and affords the vision a full sweep up and down the vast chasm.

A long silence ensues as we contemplate the panorama before us. Words are indeed idle: photographs are misleading: the masterpiece of the artist is inadequate. These may give some idea of the contour of the canyon and some hint of its coloring, but the awful distances. the overpowering vastness, dawn upon one only when his own eyes look upon the scene. It is this that quite overwhelms the beholder, who as a rule has little to say the first few minutes when the canyon in its full splendor bursts on his vision. There it lies before him, resplendent in every color of the spectrum, a vast rent in the mountains one-third of a mile deep, and at its bottom, too far away to be heard, dashes the vexed river a hundred feet wide, they tell us, but



CANYON OF THE YELLOWSTONE RIVER From the Original Painting by Thomas Moran, N. A.



seemingly a mere writhing thread of emerald. The falls in the distance seem dazzling columns of snowy whiteness edged with rainbows and half hidden at times in white mist. The prevailing hue of the canyon walls is pale yellow, but there are many dashes of warmer coloring, from soft browns and pinks to blood red. The sides are fretted into a thousand fanciful architectural shapes—spires and turrets and battlemented walls and in places the eroded rocks have an odd semblance to a ruined church or castle. The canyon is quite devoid of vegetation, though here and there stately pine trees have fastened themselves in inaccessible places on its walls.

Anxious to see every phase of its beauty possible in our limited time, we drove to Artist's Point on the opposite side of the river. This is the spot from which Moran painted his great picture now hanging in the National Capitol. One has here a much nearer view of the falls, both Upper and Lower, and may gain some idea of the tremendous plunge of the latter, though if one is hardy enough for the climb, the foot of the falls is the place to appreciate most their real power and grandeur, if not their beauty.

But it is folly for me to essay a description for which far abler pens have been inadequate. Better leave the reader with the masterly pictures of Mr. Moran, which tell the story as nearly as it may be told by aught save a personal visit to the canyon. If these pictures or anything I have said should prove sufficient to interest others in this truly representative American wonderland, it will be enough.

The time will come, no doubt, when the standard route of travel through the Park will be changed, and instead of returning to Norris Basin from the canvon and doubling back to Mammoth Hot Springs, the tourist will proceed over the Mount Washburn road to Tower Falls -due north-and from thence to Fort Yellowstone. It may require a day longer, but it will be a day well spent, for the view from Mount Washburn is another of the marvels of the Park. Unfortunately, a rainy day interfered with our plans; the mountain was enveloped in low-hung clouds, making a trip to the summit quite useless. I will therefore borrow the language of one who is a sort of tutelar spirit of our Western wilds and whose vast lore and keen appreciation is set forth in language of befitting beauty-Mr. John Muir, the gentle naturalist



A PASSING SHOWER, CANYON OF THE YELLOWSTONE From the Original Painting by Thomas Moran, N. A.



whose all-embracing love of nature even extends to the despised rattlesnake. In his book "Our National Parks" he thus describes the view from Mount Washburn:

"Perhaps you have already said that you have seen enough for a lifetime. But before you go away you should spend at least one day and a night on a mountain top, for a last general, calming, settling view. Mount Washburn is a good one for the purpose, because it stands in the middle of the park, is unencumbered with other peaks, and is so easy of access that the climb to its summit is only a saunter. First your eye goes roving around the mountain rim amid the hundreds of peaks; some with plain flowing skirts, others abruptly precipitous and defended by sheer battlemented escarpments; flat-topped or round; heaving like sea-waves or spired and turreted like Gothic cathedrals; streaked with snow in the ravines, and darkened with files of adventurous trees climbing the ridges. The nearer peaks are perchance clad in sapphire blue, others far off in creamy white. In the broad glare of the noon they seem to shrink and crouch to less than half their real stature and grow dull and uncommunicativemere dead, draggled heaps of waste ashes and

stone, giving no hint of the multitude of animals enjoying life in their fastnesses, or of the bright bloom-bordered streams and lakes. But when storms blow they awake and arise, wearing robes of cloud and mist in majestic speaking attitudes like gods. In the color glory of morning and evening they become still more impressive; steeped in the divine light of the alpenglow their earthiness disappears, and blending with the heavens, they seem neither high nor low.

"Over all the central plateau, which from here seems level, and over the foothills and lower slopes of the mountains, the forest extends like a black uniform bed of weeds, interrupted only by lakes and meadows and small burned spots called parks—all of them, except the Yellowstone Lake, being mere dots and spangles in general views, made conspicuous by their color and brightness.....

"A few columns and puffs of steam are seen rising from the treetops, some near, but most of them far off, indicating geysers and hot springs, gentle-looking and noiseless as downy clouds, softly hinting the reaction going on between the surface and the hot interior. From here you see them better than when you are standing beside them, frightened and confused, regarding



GREAT FALLS, FROM BELOW, YELLOWSTONE PARK Courtesy Northern Pacific Railway

them as lawless cataclysms. The shocks and outbursts of earthquakes, volcanoes, geysers, storms, the pounding of waves, the uprush of sap in plants, each and all tell the orderly lovebeats of Nature's heart.

"Turning to the eastward, you have the canyon and reaches of the river in full view; and yonder to the southward lies the great lake, the largest and most important of all the high fountains of the Missouri-Mississippi, and the last to be discovered.....

"Yonder is Amethyst Mountain, and other mountains hardly less rich in old forests, which now seem to spring up again in their glory; and vou see the storms that buried them—the ashes and torrents laden with boulders and mud, and centuries of sunshine, and the dark, lurid nights. You see again the vast floods of lava, red-hot and white-hot, pouring out from gigantic geysers, usurping the basins of lakes and streams, absorbing or driving away their hissing, screaming waters, flowing around hills and ridges, submerging every subordinate feature. Then you see the snow and glaciers taking possession of the land, making new landscapes. How admirable it is that, after passing through so many vicissitudes of frost and fire and flood, the phys-

iognomy and even the complexion of the landscape should still be so divinely fine.....

"The sun is setting; long, violet shadows are growing out over the woods from the mountains along the western rim of the Park, the Absaroka Range is baptized in the divine light of the alpenglow, and its rocks and trees are transfigured. Next to the light of the dawn on high mountain tops, the alpenglow is the most impressive of all the terrestrial manifestations of God.

"Now comes the gloaming. The alpenglow is fading into earthly murky gloom, but do not let your town habits draw you away to the hotel. Stay on this good fire-mountain and spend the night among the stars. Watch their glorious bloom until the dawn, and get one more baptism of light. Then, with fresh heart, go down to your work and whatever your fate, under whatever ignorance or knowledge you may afterward chance to suffer, you will remember these fine, wild views, and look back with joy to your wanderings in the blessed old Yellow-stone Wonderland."

Tower Fall is at the lower end of the canyon and is one of the most charming of the cataracts of the Yellowstone. It plunges some

seventy-five feet sheer downwards, while high above it rise the spirelike pinnacles which give the name to the fall. The words of the discoverer, penned some thirty years ago, should forever be associated with the entrancing scene which he so vividly and gracefully describes:

"Nothing can be more chastely beautiful than this lovely cascade, hidden away in the dim light of overshadowing rocks and woods, its very voice hushed to a low murmur, unheard at the distance of a few hundred yards. Thousands might pass by within half a mile and not dream of its existence; but once seen, it passes to the list of most pleasant memories."

There is no spot in the Park more delightfully located for the lover of nature who desires to camp under the open skies in the midst of the loveliest and most inspiring surroundings. Far off the beaten path of the tourist and the goal of only the infrequent visitor, it offers opportunity for complete severance from the busy world and for undisturbed rest and recreation. The walls of the canyon here are of columnar basalt, a formation similar to the Giant's Causeway in Ireland, rising to a height of eight hundred feet or more in such regularity as to seem almost the work of man.

The road from Tower Fall to Mammoth Hot Springs is mainly through a rather uninteresting tract, being in good part a treeless meadow where thousands of elk pasture in winter time. This road will not compare with the main traveled roads of the Park, but we may hope that some day a fine hotel may be built near Tower Fall and the main route of travel take this direction.

Among the more interesting phenomena are the Mammoth Hot Spirngs near Fort Yellowstone. The waters, issuing from the earth just below the boiling point and heavily charged with mineral deposits, have in long course of time built up strange, beautifully colored terraces, many of them of great extent. In the main these are of snowy whiteness, giving the semblance of sculptured marble, but others are of variegated coloring, in which pink and orange seem to predominate. This is due to a small vegetable growth—not to mineral pigments, as might be supposed—and the color vanishes when the spring becomes extinct. Some of the springs take the form of pools several hundred feet in diameter, and the water is of remarkable transparency, despite the heavy solution of minerals it carries. Of this Dr. Havden said:

38



JUPITER TERRACE, YELLOWSTONE PARK Courtesy Northern Pacific Railway



"The wonderful transparency of the water surpasses anything of the kind I have ever seen in any other portion of the world. The sky, with the smallest cloud that flits across it, is reflected in its clear depths, and the ultra-marine colors, more vivid than the sea, are gently heightened by constant, gentle vibrations. One can look down into the clear depths and see, with perfect distinctness, the minutest ornament on the inner sides of the basin; and the exquisite beauty of the coloring and the variety of forms baffle any attempt to portray them either with pen or pencil."

But a few miles from Mammoth Hot Springs, the road passes through the famous Golden Gate over a concrete causeway lately constructed by the Government. This clings to the almost perpendicular side of the cliff, a splendid cement road protected by substantial balustrades and supported upon massive rounded arches. The view from either entrance of the canyon is a beautiful one, and the yellow lichen covering the rocks has given the pass its name—Golden Gate. On one side of the road giant cliffs stretch their stern outlines up into the heavens and far below on the opposite side dashes the clear mountain stream. There is one

uncanny feature—at times masses of rock become detached from the cliffs and hurl themselves on the road. A huge piece had recently been broken from the cement balustrade in this manner. Just beyond the Golden Gate towards Mammoth Hot Springs are the irregular rocks styled the Hoodoos-though the reason for this name is hardly apparent. These huge blocks of limestone—many of them as large as a goodsized house—are thrown promiscuously about, lying in every conceivable position. The whole region is uncanny; what cataclysm tumbled these huge stones in wild confusion, apparently with as little effort as though they were a child's marbles? One theory is that at some distant time the river eroded vast caves beneath the mountain, which collapsed in these unwieldy blocks of stone.

To me, the most inspiring view along the regular route of the tour is the far-reaching scene from Shoshone Point. Leaving the hospitable doors of Old Faithful Inn, we began a steady climb of perhaps ten miles, winding our tedious course through the continuous forest of pine trees that covers the mountain slopes. We are crossing the continental divide and note on the milestones the steadily increasing altitude.





ROAD THROUGH GOLDEN GATE CANYON, YELLOWSTONE PARK Courtesy F. J. Haynes

Twice we cross the line of the divide, which sweeps northward here in a great loop; midway, on the very crest, our driver pauses and pointing with his whip laconically remarks, "The Tetons." We are altogether unprepared for the panorama that bursts on our vision and may well hold our breath in surprise and delighted astonishment. Right below us. like a great diamond, lies Shoshone Lake, rippling and glittering in the sunshine, its brilliancy enhanced by the dense green of the pines that encircle it. while far away. shrouded in the soft blue haze of distance, rise the blue and purple peaks of the Tetons, the giants of the Rocky Mountain Range. Between lies a wide stretch of pine-clad mountains, with here and there a glint of lake and river. The day is perfect, cloudless and serene, and it is distance alone that lends the soft atmospheric tone to the snow-capped summits some fifty miles away. One may catch other glimpses of these majestic peaks from different points along the road-always inspiring, always beautiful and grand, but nowhere else is there such a splendid foreground to complete the picture as at Shoshone Point.

But one may well despair of enumerating even a fraction of the marvelous scenes and

phenomena that abound in the Yellowstone. Such a catalogue would of itself fill a volume. The sketches I have drawn are only typical and are at best but dim reflections of the reality. Much will depend on the weather, but fortunately, the average weather in the Park is fine and the showers and dull skies usually transitory. And in this connection I might remark that cool, crisp days and rather sharp nights predominate, a condition for which the tourist should adequately provide, especially early in the season. Yellowstone Lake is seldom free from ice until the middle of June and in some seasons much later. The heavy snows are often long in disappearing. The days in August and September are often fairly warm, though never oppressive, and one will find this a very enjoyable time to visit the Park. There will be fewer wild flowers and less water in the streams, but the crowds will be smaller and the mosquitoes and gnats, often very annoying earlier in the season. will have disappeared.

V

THE FAUNA AND FLORA OF THE PARK

The wild animals are by no means the least interesting feature of the Park—though many of them are hardly wild in the accepted sense. Long immunity from the rifle of the huntsman has left the denizens of this enchanted land almost free from fear of man, and they more often resemble our domestic animals in their habits and actions. There are bears, buffaloes, elk, deer, antelopes, mountain sheep, many fur bearers—including several colonies of beavers and numerous smaller animals, among which several varieties of squirrel are oftenest seen. The tourist by the ordinary route will see only a few of these native inhabitants of the Park; the elk and deer keep to the mountains during the daytime and only stragglers are seen. In the woods near Mammoth Hot Springs we came upon a large deer which eyed us curiously with little signs of fear, though we came within a dozen yards of it. The buffaloes here, some

dozen in number, are a daily sight; for the soldiers drive them into a large corral a mile from the hotel and the animals behave much as domestic cattle. The beaver is always shy, but we saw one or two of them at Beaver Lake near the Obsidian Cliff. The industrious little brutes have dammed the creek here until it forms a considerable late remarkable for the indigo-blue colors of its waters. There are several other colonies in the Park, though not on the regular route of travel. Wolves and mountain lions, once fairly common, have been exterminated by the guards. Squirrels and chipmunks one will see by the hundreds, often perched on a log, chattering saucily at the coach as it passes.

Birds are principally migratory, since the eggs of few species hatch at the altitude of the Park. Pelicans abound on the lake, having appropriated an island to their own use, and numbers of these huge birds flying low over the water often afford a picturesque sight. They are quite fearless and sometimes make little effort to get out of the way of the boats. But, strangest of all, the timidity of the wild ducks vanishes in the Park—they seem to realize they are safe here and one will often see a flock feed-

ing fearlessly within a stone's throw. Even the Canada duck, said to be the most timorous of all, shows the same sense of security in this favored spot. Eagles are to be seen but rarely, though one for years has nested on Eagle Cliff, a high rocky pinnacle on the road near Gardiner.

But of all the living things of the Park, the bears are seen oftenest and create the greatest interest among the tourists. Bruin has quite lost his savage traits and is sometimes entirely too familiar with campers. He will loot a camp in daytime when the owners are away and often prowl around by night in an unpleasant manner. A friend told me of being roused by a noise in his tent one night and on striking a match found a large bear nosing round, but the intruder speedily departed when discovered. The bears are a never-failing source of attraction at the hotels, especially at Old Faithful and Lake and a dozen or more are often seen at the garbage dumping ground, where their antics amuse spectators of all ages.

Reptiles are very rare, though rattlesnakes have been found in the lower altitudes, and harmless lizards are numerous.

Of all things Yellowstone Park is the fisherman's paradise. Here the disciple of Ike Walton

is hampered with no license or restriction save that he must confine himself to hook and line. Yellowstone Lake and many of the streams literally swarm with trout which were "planted" by the United States Fish Commission a few vears ago. Rainbow and Loch Leven trout the latter from the famous Scotch lake and of unequalled excellence—are common in certain localities, and native mountain trout abound in the lakes and most of the streams. The most famous fishing ground is at the outlet of Yellowstone Lake, and even the unskilled amateur is certain of success here. The regular tourist, who has but half a day at this point, often employs it in fishing. Of late years a large proportion of the fish taken is found to be worthless on account of a parasite which has attacked them, especially in Yellowstone Lake. The number of fish here is so vast that the food is insufficient, making them especially susceptible to the ravages of the parasite. Even if one does not greatly care to fish, he will be delighted to watch the schools of trout as they dart about in the clear streams, giving the touch of animation that always adds to the interest of natural scenery.

The forests of the Yellowstone are not comparable to those of the Yosemite, and really

fine individual trees are rare. In places the pines grow almost as thickly as they can stand. springing up over myriads of fallen trunks—no doubt victims of fire and storm. A large part of the mountains is devoid of trees of any kind, and many comparatively level tracts like Hayden Valley are also quite treeless. Perhaps two-thirds of the Park is well wooded. Various shrubsthe gooseberry, currant, chokecherry, buffaloberry-abound and wild fruits and flowers in great variety are to be found. The flowers are especially numerous in season and are surprisingly hardy considering the fact that there are few nights in the year without frost. The rarer and more beautiful varieties are found in the higher elevations and one of the delights of ascending the mountains is the beauty and fragrance of the flowers that deck their slopes.

VI

THE HISTORY AND TRADITIONS OF THE PARK

When one has finished the round of the Park, he will likely find himself curious to know the story of the discovery and setting aside of this wonderland as a pleasure-ground for any who may care to come. It is refreshing to find an instance where the National Government acted with great promptness, and wisely as well. and has been fairly consistent in carrying out its original plans. It was within two or three vears after reliable surveys had been made and really authentic descriptions of the marvelous country given to the world that the act of Congress, setting aside the region as a National Park "for the benefit and enjoyment of the people," was passed. No time was lost in which to give jobbers and speculators a chance to get in their work; perhaps the region was then considered of little value. In any event, it was set aside so soon after its discovery as to insure that its virgin state would be preserved—that

even the railroad would be excluded and no town could be founded within its limits.

It would seem that the Indian tribes in this vicinity—the Blackfeet, Crows and others knew little of the country within the present bounds of the Park before the advent of the white man. There is good evidence that scattering tribes of red men had been in the region from time to time, but the number must have been few and their visits infrequent. Doane. who surveyed the locality in 1870, ascribes the absence of the Indians to "superstitious fears." He saw a few Sheep-eaters and Snake-Indianscorresponding quite closely in degradation to the Digger Indians—in the present limits of the Park, but said that the larger tribes never entered the basin. There is some dispute about this, but it is easy to conceive that such an array of mysterious phenomena could not fail to excite the superstition of savages, who would naturally attribute the strange manifestations to infernal powers.

The earliest reference to the region is in the stories of John Colter, a member of the Lewis and Clark Expedition of 1806. As the expedition returned to St. Louis, this man at his own request was released to engage in trapping

beavers in the vicinity of what is now the Park. He joined a party of trappers and being a resourceful man with some knowledge of Indian habits and language, was sent out with a companion to gain the good will of several of the tribes. His adventures were astounding, though apparently authentic, and again illustrate the wonderful endurance and vitality of the old-time Western trapper. In the course of his wanderings his companion was killed and he himself captured by the Blackfeet Indians, then intensely hostile to the whites. A council was at once held by the savages, three hundred or more in number, to decide how their unfortunate captive should be disposed of, and the plan of binding him to a tree to serve as a target for their arrows seemed about to prevail when the chief interfered. He ordered that Colter be stripped of his clothes and given a chance to run for his life. Doubtless the old savage thought merely to have a little diversion; it is hardly possible he believed that under such conditions his prisoner could outrun and finally escape from several hundred fleet-footed wariors. It chanced, however, that Colter was a famous runner and distanced all his pursuers save one, upon whom he suddenly turned, killing the savage with his own

50

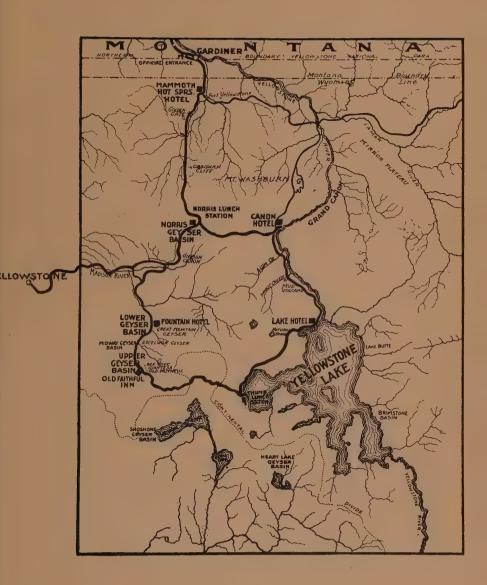
weapon, which the desperate scout wrested from him. Plunging into the river near at hand, Colter hid until nightfall under a pile of driftwood and under cover of darkness swam down the stream, eluding his pursuers. Then for seven days he wandered stark naked under the burning sun, his feet bruised by stones and torn by the prickly pear, when by strange chance he reached the trappers' fort from which he started out some months before. Such a story seems quite incredible, but it is well authenticated.

But while his companions and the people generally seemed willing enough to accept Colter's almost incredible story of his escape, they laughed at his tales of a wonderful country he had visited in his wanderings—a land of steaming pools, springs of boiling water that at intervals shot hundreds of feet in the air, of seething caldrons of pitch and great lakes and rivers. All this was treated with derision and classed with the tales of Gulliver and Munchausen. "Colter's Hell" was the title the wise ones gave to the region of the trapper's stories. But we know now that it was truthful enough and the first intimation the world received of the Yellowstone wonderland.

Nearly half a century elapsed after the

thrilling experience of John Colter before authentic facts were published concerning the region he tried to describe. Legends and rumors more or less fantastic were affoat concerning the strange region, but it was not until 1869 that a well-equipped prospecting party undertook to explore the head waters of the Yellowstone. This was a purely private enterprise and was undertaken by a party of three explorers with the definite purpose of ascertaining the true nature of the country about which so many strange stories had been told. These three men. "armed with repeating rifles, Colt's six-shooters and sheath-knives, with a doublebarreled shot-gun for small game; and equipped with a good field-glass, pocket-compass and thermometer, and utensils and provisions for a six weeks' trip, set out from Diamond City on the Missouri River, forty miles from Helena, September 6, 1869.

"The route lay up against the Missouri to the Three Forks; thence via Bozeman and Fort Ellis to the Yellowstone River; and thence up the Yellowstone to its junction with the East Fork inside the present limits of the Park. From this point they crossed to the east bank and followed up the river, passing through the





many canyons of hot springs to be found east of the canvon. On September 21st, they arrived at the Falls of the Yellowstone, where they remained an entire day. Some distance above the rapids they re-crossed to the west shore and then ascended the river past Sulphur Mountain and Mud Volcano to Yellowstone Lake. They then went to the extreme west shore of the lake and spent some time examining the surpassingly beautiful springs at that point. Thence they crossed the mountains to Shoshone Lake, which they took to be the head of Madison and from that point struck out to the northwest over a toilsome country until they reached the Lower Gevser Basin near Nez Perce Creek. Here they saw the Fountain Gevser in action and the many other phenomena in that locality. They ascended the Firehole River to Excelsion Geyser and Prismatic Lake, and then turned down the river on their way home."

Thirty-six days were consumed on the expedition and the party witnessed a large number of the marvels of the Park, which so astonished them that "on their return they were unwilling to risk their reputation for veracity" by a full recital of the wonders they had seen. However, their experience had a strong influence in the

formation of a large semi-official expedition that explored the country the following winter—1870.

This expedition left Helena, Montana, in August and consisted of nine persons—many more who originally intended to accompany it being deterred on account of serious Indian disturbances that arose about the time set for departure. The expedition was under the direction of General Washburn, Surveyor-General of Montana, and its personnel was of unusually high order. A small military escort under Lieutenant Doane joined the party at Fort Ellis and the expedition entered the present territory of the Park on August 26th, following the course of the Yellowstone River. According to their own statement, the members of the expedition were profoundly skeptical of the wonders they were about to see, especially as to the boiling springs and gevsers. Tower Fall first excited their astonishment, but was speedily forgotten in the wonder and amazement that the canvon and Lower Falls aroused. From Mount Washburn they viewed the great panorama before them and all doubt as to the remarkable characteristics of the region vanished at once. Before leaving, this party witnessed most

of the phenomena now on the regular tour of the Park, among these Mammoth Hot Springs, Yellowstone Lake, and the Upper and Lower Basins. On emerging from the forest into the field of geyser activity now styled Upper Basin, they were delighted to behold the first exhibition of Old Faithful ever witnessed by white men. The overjoyed wanderers could scarce believe their eyes as they beheld the steaming column rising before them, glorious in the crisp air of a clear September day. The era of myth and fable was past and the truth about the great American wonderland was to be given to the world at last.

A most remarkable incident of the expedition was the experience of Mr. Evarts, who became separated from the party and nearly lost his life in the weird country he had helped to discover. For thirty-seven days he wandered—mainly in circles, it seems—and when nearly exhausted he was rescued by a party of trappers. Being wholly without weapons, his food consisted of thistle roots, which he boiled in the springs. His difficulties were much increased by his extreme near-sightedness, which greatly hindered him in securing food and water. His

55

companions on missing him searched for him a week and then gave him up as lost.

The official expedition the following year added but little to the knowledge of the wonders of the Park, but made some very important surveys and collected a vast amount of accurate data concerning the region. Many photographs were taken which greatly assisted in disseminating knowledge of the newly discovered wonderland.

The idea of setting the region aside as a National Park appears to have occurred to several minds at once. It was so manifestly the correct thing to do that this can hardly be considered strange. It was indeed fortunate that the idea was so promptly acted upon before private parties had taken up the land or in any way interfered with the formations or phenomena. The bill was introduced in Congress early in 1872 and met with little opposition, becoming a law when signed by the President March 1st following.

The exact wording of the act itself—unusually short and to the point—may serve as a fitting close to our rather hasty sketch:

THE YELLOWSTONE "THE ACT OF DEDICATION"

"AN ACT to set apart a certain tract of land lying near the headwaters of the Yellowstone River as a public park.

Sec. 1. Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled. That the tract of land in the Territories of Montana and Wyoming lying near the headwaters of the Yellowstone River and described as follows. to-wit: Commencing at the junction of Gardiner's River with the Vellowstone River and running east to the meridian, passing ten miles to the eastward of the most eastern point of Yellowstone Lake: thence south along the said meridian to the parallel of latitude, passing ten miles south of the most southern point of Yellowstone Lake; thence west along said parallel to the meridian, passing fifteen miles west of the most western point of Madison Lake; thence north along said meridian to the latitude of the junction of the Yellowstone and Gardiner's Rivers: thence east to the place of beginning, is hereby reserved and withdrawn from settlement, occupancy, or sale under the laws of the United States, and dedicated and set apart as a

public park or pleasure ground for the benefit and enjoyment of the people; and all persons who shall locate, or settle upon, or occupy the same or any part thereof, except as hereinafter provided, shall be considered trespassers and removed therefrom.

"Sec. 2. That said public park shall be under the exclusive control of the Secretary of the Interior, whose duty it shall be, as soon as practicable, to make and publish such rules and regulations as he may deem necessary or proper for the care and management of the same. Such regulations shall provide for the preservation from injury or spoilation of all timber, mineral deposits, natural curiosities or wonders within said Park, and their retention in their natural condition.

"The Secretary may, in his discretion, grant leases for building purposes, for terms not exceeding ten years, of small parcels of ground, at such places in said Park as shall require the erection of buildings for the accommodation of visitors; all of the proceeds of said leases, and all other revenue that may be derived from any source connected with said Park, to be expended under his direction in the management of the same and the construction of roads and bridle-

paths, and shall provide against the wanton destruction of the fish and game found within said Park and against their capture or destruction for the purpose of merchandise or profit. He shall also cause all persons trespassing upon the same after the passage of this act to be removed therefrom, and generally shall be authorized to take all such measures as shall be necessary or proper to fully carry out the objects and purposes of this act."



The Yosemite







CASCADE FALLS, YOSEMITE PARK
From the Original Painting by Thomas Moran, N. A.

The Yosemite

I

THE VALLEY AND THE MOUNTAINS

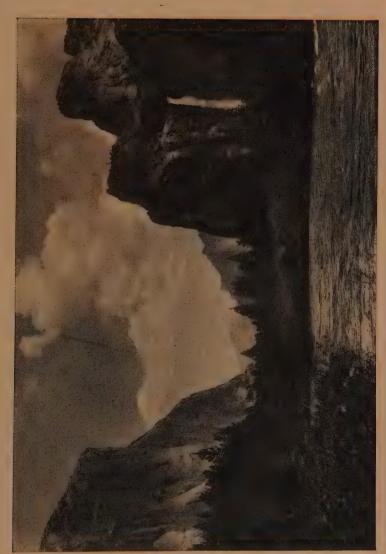
If, as is probable, strangeness and almost unearthly weirdness impressed you most in the Yellowstone, the all-predominating characteristic of the Yosemite, which is likely to prove as striking, is beauty. True, there is grandeur in its mountain peaks and walls and there is a suggestion of awful power in its torrents that sweep unhindered over stupendous cliffs, but none the less it is beauty that makes the predominant impression on the beholder. Here is a world elvsian in this peaceful valley with its marvelous Mirror Lake, its green and crystal river, its sparkling brooks, its forests of unmatched majesty and its riot of wild flowers, shut in by towering mountains which fling their fretted spires and sullen ramparts against a heaven as blue as that of Italy itself. If the Yellowstone, with its sulphur mountains, its boiling springs and steaming vales, may be com-

pared to an inferno, surely we have the antithesis in this lovely vale whose fittest semblance is Paradise. Here indeed we may find a realization of Tennyson's

"Fantastic beauty such as lurks
In some wild poet when he works
Without a conscience or an aim."

In color, in contour, in beauty, in grandeur, in all that goes to make a natural landscape enchanting and impressive, Yosemite surely excels.

It is easy of access now, since the advent of the railway up the Merced River Canyon to El Portal, not very far from the official entrance of the Park. One may take a Pullman car at San Francisco or Los Angeles at midnight and at daybreak find himself gliding along the banks of the river in the mountain pass that leads to the valley. El'Portal station is reached quite early in the morning. Here a new hotel, located well up the mountainside, affords opportunity for breakfast and it is also the starting point for the coaches that take you into the valley. Very different indeed from the situation four or five years ago, when a coach ride of seventy-five miles was necessary to reach the point where the train now stops. At that time perhaps quite



BRIDAL VEIL MEADOW, YOSEMITE VALLEY Courtesy Southern Pacific Railway



as many came to Yosemite by the way of Raymond on the south, visiting the great trees enroute, as from Merced, but in either case the distance by coach was about the same, and while every mile of the road is replete with interest and beauty, not a few people were deterred by the one hundred and fifty miles of coaching over mountain roads. To this was added the round of the valley by coach and trail, forty miles or more, depending upon how thoroughly the tourist might wish to explore the Park.

And the Yosemite roads are not to be compared with those of the Yellowstone. In fact, they average little better than mountain trails. usually too narrow for vehicles to pass each other, very steep in places, distressingly stony and rough, and in dry weather covered several inches deep with an impalpable white dust that rolls in suffocating clouds from the wheels. If one is content to visit Yosemite Valley only he can now do so and drive no more than twentyfive to fifty miles by coach, supplemented, of course, by mule-back trail trips to his liking. And this is as far as many go—as far as I myself thought to go, in fact, But fortunately, wiser counsel prevailed and by extending our time two days longer we visited the Mariposa Grove of

big trees. This required a coaching trip of some eighty miles—every mile rough and dusty, but it is, withal, an experience the memory of which we would not willingly part with. And had our time been a day or two longer we might have employed it pleasantly and avoided much of the fatigue caused by our too hurried trip.

The coach which is to take us into the Park is waiting in front of the hotel. It is a fourhorse, ten-passenger affair quite similar to those used in the Yellowstone. Both are modifications of and probably improvements upon the old-time stagecoach of the mountains, though of course the latter had greater provision for mail and baggage. The Yosemite coaches have no covering, but this is hardly necessary in a country where rain is light and infrequent during the tourist season. The bodies are swung on leather thorough-brace springs and, if the trip be not too long, are fairly comfortable to ride in. However, the condition of the Yosemite roads is such that no vehicle of whatever description could be expected to roll smoothly over them.

Almost a mile from the hotel we enter the official confines of the Park, but we proceed a



EL CAPITAN, YOSEMITE VALLEY Courtesy Southern Pacific Railway



half dozen miles farther ere we come in sight of the mountain-girdled vale whose beauty we are about to explore. The scenery between El Portal and the valley is thoroughly picturesque. We follow a narrow canyon between mountainous hills, and towering cliffs often rise above the road, alongside which the Merced River courses, now in swift cascades, now lying in quiet pools beneath overhanging trees, and again fleeting past in angry rapids; here the water is clear as crystal, there emerald green. but always delightful in its variations of color and light. It is a steady, up-hill climb to the entrance of the valley. The road is uneven and deep with dust, and the heavy coach severely taxes the four spanking horses, which are allowed frequent breathing spells; we pause to give them water from the river and to drink, ourselves, from the same crystal flood. We have been long on the road; it seems we must be nearing our goal. But the driver dashes our hopes; we have come only four miles, one-third of the distance to our destination. The weather is unusually warm for the Yosemite, where the rule is bright crisp days and sharp, if not frosty nights, and the heat with the dust clouds is anything but conducive to comfort. Despite

the beauty of the scenery along the river, we find ourselves growing restive and eagerly looking forward to the journey's end.

But our discomforts are all forgotten in an instant. Though a sudden opening in the pines a vast wall of dazzling whiteness flings itself in bold relief against the intense azure of the sky —it is El Capitan, rising sheer almost a mile from the floor of the valley and dwarfing the giant pines that crowd about its foot. A little farther, on the opposite side of the valley, Bridal Veil Fall, now shrunken to a silvery ribbon, drops its tenuous thread from a cliff a thousand feet above us. Then wonders begin to crowd upon us from every direction. Cathedral Rocks —vast sculptured twin spires, one of them rising sheer and solitary for seven hundred feet—pierce the skies twenty-six hundred feet above us. seemingly laughing to scorn the efforts of any mortal architect. Standing side by side they have resemblance—perhaps somewhat fancied to the splendid facade of the Duomo of Florence. Then the Three Brothers greet our vision, and just above us we behold El Capitan from an even more impressive viewpoint. Yonder is Sentinel Rock, thrusting its rugged spire high in the heavens, and we see through the pines the effect



BRIDAL VEIL FALLS, YOSEMITE VALLEY
Courtesy Santa Fe Railway



of Mr. Moran's masterly picture, save that the rock looms bald and glaring in the noonday sun—not tinged with the purple evening shadows of the artist's more poetic rendering. Behind it is Sentinel Dome, one of the strange spherical glacier-scarped peaks of which we are to see several before we leave the valley.

Ere we have recovered from our astonishment and while still quite overwhelmed with the display of wonders on every hand, we arrive at the end of our first day's journey. The coach leaves some of its passengers at the camps, but several go on to the old-fashioned Sentinel Hotel that for forty years has afforded shelter and good cheer to Yosemite travelers.

It is a rambling wooden structure situated in the pleasantest spot in the valley. Its verandas to the rear overhang the clear waters of the river and a school of trout often flits about beneath your eye—too well fed, however, to be easily tempted by hook and line. About three-quarters of a mile distant there is a full view of Yosemite Fall, the highest cataract in the world, which has a sheer drop of sixteen hundred feet from the edge of the cliff over which it pours and a total descent of twenty-six hun-

dred feet to the floor of the valley. It is sadly shrunken now, but in the height of its glory in May or June a raging torrent thirty-five feet wide, breaking almost to white foam ere it reaches the bottom, fills the valley with its thunder and the beholder with awe. It stands, a column of dazzling white, often edged with rainbows, in glorious relief against its background of red and yellow granite, and disappears among the somber pines at its foot.



YOSEMITE FALLS, YOSEMITE VALLEY Courtesy Southern Pacific Railway



H

UP GLACIER POINT TRAIL

We reached the hotel shortly before noon and had the remainder of the day to enjoy the beauty of the surroundings and to rest in anticipation of the strenuous work we had in view for the morrow. For we were easily persuaded to extend our time another day to take the trail to Glacier Point and from thence to Wawonathirteen miles by mule and twenty-six more by coach. It is a trip that should occupy two days if one has the leisure—but if not, better endure a little fatigue than miss it. The trail trip will give at least one experience in mountain climbing, but there is no end of opportunity in this direction in the Yosemite, ranging from comparatively easy trails upon which one need not dismount, to the hardest possible work on foot. Some years ago an enterprising Scotchman by the name of Anderson scaled the shining sides of Half Dome, climbing a thousand feet of the perpendicular wall by means of a rope ladder

fastened to pegs which he drove into the rock. This was used by other adventurers, but finally decayed so as to become dangerous and its use was forbidden, and for many years no human being has set foot on the summit of Half Dome. Sentinel Rock, too, seemingly inaccessible as it is, has been scaled several times—once by a woman. The ascent is difficult and dangerous, since the peak rises sheer for a distance of fifteen hundred feet. The ascent of El Capitan is not so arduous, though it is usually undertaken only by the more venturesome. Clouds Rest, however, which overtops everything else in the vicinity and from which one may look down even on Half Dome, may be ascended without great danger, though not without fatigue. The round trip from Sentinel Hotel comprises about twenty-five miles and must be made on muleback. A clear day must be selected, since not infrequently the clouds that hover about the summit-well named Clouds Rest-will shut out the view. Cumulus clouds of dazzling whiteness are common in the Yosemite heavens and present a scene of unmatched brilliancy as they roll along just over the peaks and lie sharply against the deep blue skies. "Cloud towers by ghostly masons wrought," they add



MIRROR LAKE, YOSEMITE VALLEY Courtesy Santa Fe Railway



much of beauty and weirdness to the more substantial forms of the guardians of the valley.

It is likely that more than one or two of these excursions will be out of question with the casual tourist, and if he is to select but one, that to Glacier Point by the way of Vernal and Nevada Falls is generally chosen. The distance is about thirteen miles and the trip is not difficult as mountain trails average, though one will climb many steep ascents and ride on the edge of many yawning precipices—but no danger need be apprehended, since the mules are so wonderfully sure-footed and cautious that accidents never occur.

We are early away next morning, since we are to visit Mirror Lake before starting on the trail—indeed to have conformed to the best traditions we should have come here at day-break; for the sunrise effect on the still little tarn is famed as a scene of surpassing beauty. But Mirror Lake is worth seeing at any time, though it is scarcely more than a mountain pool. It is surrounded by towering trees and these, with every rock and fallen trunk, are reflected with marvelous fidelity in the dark and somewhat sinister-looking water. We view it from every angle and the ubiquitous photographer

insists on a "snapshot" of the party before we proceed on our journey.

Our party was a small one—some half dozen besides our guide—two Belgian counts who were just completing a tour of the world, a globetrotting Englishman and a very fussy old lady of the propagandist class being among the number. The latter rode directly behind me and sorely tried the good nature of our guide by constant nagging and especially by taking him to task for smoking his pipe. He was a typical westerner, good natured and loquacious, but evidently not overstocked with patience, for he muttered a few expletives at the reproof so pointedly administered him and rode some distance ahead, leading the mount of another lady member of the party who was more considerate of his feelings and to whom he showed every courtesy. The old lady followed directly behind myself and though my mule was one of the most sure-footed—he had been twenty years on the trail—she expressed continual concern anxiety lest he should stumble and fall. Barney. as they called him, was inclined to be pretty slow and paid little heed to my urging. As a consequence, Martha-my companion's mule-often crowded him closely, at which times the old



NEVADA FALLS, YOSEMITE VALLEY Courtesy Santa Fe Railway

lady's uneasiness seemed to increase tenfold. Naturally I could not but be affected by her anxiety for my safety—for it surely must be this that made her take such continual interest in Barney's keeping his feet—though my doubts were somewhat aroused when I noticed that her solicitude for fear "Barney would stumble" increased in proportion to her proximity to me and when, in a particularly steep place, she exclaimed hysterically, "Barney will surely fall down—and Martha will stumble over him."

In ascending the trail we follow the Merced for some distance and catch many glimpses of swift rapids and of Nevada and Vernal Falls. These are two of the finest of the Vosemite cataracts, with a good volume of water at all times of the year. We continue along the riotous river past the Happy Isles and cross a rude log bridge from which, barely a half mile away, we have a splendid view of Vernal Falls. where the river drops sheer three hundred and fifty feet—a glorious column of dazzling white against the dark background of the canyon. From the foot of the cataract a cloud of spray rises incessantly and the river, as if mad to escape its vexation and turmoil, dashes in wild precipitation among the great granite rocks that

lie scattered along its bed. The trail passes directly by the top of the fall and we dismount for a short rest and closer view. A mile farther we come to Nevada Fall, twice the height of Vernal, though its drop is not so sheer. It plunges down the sharply sloping precipice over which it writhes like a living thing, green in color tone and more compact than a sheer fall, but a sight of unmatched grandeur and beauty, made the more impressive by the great Liberty Cap, an odd granite cone rising two thousand feet from the pool at its base. Just back of the fall stands Mount Broderick, while Half Dome near at hand looks majestically down upon the roaring flood.

And this same Half Dome is the glory of Glacier Point Trail, if not indeed of the valley. Whatever direction our path twisted we still beheld this bald, awful mountain flinging its rounded summit, dazzling white, against a clear sky of intensest blue. It overshadows and dominates everything and one can scarce repress an earnest longing to stand on its dreadful summit and view the marvelous scene beneath. "I was on the Half Dome once," said the guide. "There is a flat space of more than eight acres, though it doesn't look it from here." I was



THE DOMES, YOSEMITE PARK Courtesy Southern Pacific Railway



seized with a happy idea—"Some day there will be a great hotel on Half Dome. Vernal Fall will furnish power to run elevators through tunnels to the top." The guide looked at me in amazement and finally said in a sympathetic tone, "I'm a-thinking a fellow would be a little weak in his upper story to talk of a hotel on Half Dome."

One will be quite ready for dinner when he reaches Glacier Point Hotel The last few miles of the trail are devoid of much interest: there is little of importance save the yawning canyon of the Illilouette-which, were it not in a land so replete with greater wonders, would be worth a long pilgrimage of itself—and the fall of this beautiful stream, which darts down a five-hundred-foot precipice. For some distance the trail closely hugs the edge of the canvon, then crosses a rustic bridge and the final ascent is begun through a dense growth of chinquapin bushes. The tourist unaccustomed to mule-back jaunts on mountain trails will find himself pretty sore and weary by the time he reaches this point and the decreasing interest of the scenery makes the end eagerly desired. A most welcome sight is the plain, unpretentious inn standing in a grove of fine pines. It affords a welcome break in the journey when time per-

mits and surely it must be well worth remaining here over night if only to see sunrise and sunset amidst such surroundings. But as it is we must make the most of our two hours' pause, and after a hasty luncheon we walk the two or three hundred yards to the famous Glacier Point view from the Overhanging Rock. No marvel of Yosemite is more widely known than this massive boulder that projects itself so airily from the extreme edge of this stupendous cliff. The great stone, weighing many tons, apparently clings to its perilous perch by the frailest hold possible, seeming as if with your weight added it must inevitably plunge to the floor of the valley more than three thousand feet beneath-so sheer that a pebble which one may drop from the stone touches nothing in its descent of more than half a mile. One sees many photographs of venturesome people standing on the edge of the rock, but they are doubtless the exceptions, for the average visitor feels little inclination to go out upon it—nor is it at all necessary to do so, since the magnificent scene may be viewed safely from behind the iron railings that guard the verge of the cliff.

And it is a scene magnificent beyond all power of pen or pencil to portray. Indeed,



OVERHANGING ROCK, YOSEMITE VALLEY Courtesy Pillsbury Picture Co.

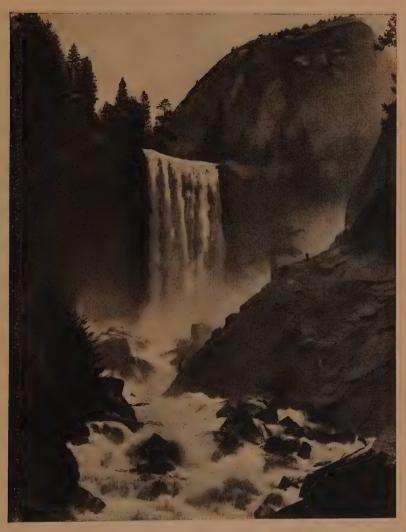
Office the Notes of the State of the Section of the

there must come to every beholder something of the feeling of the pilgrim of the Earthly Paradise, when

"Down into the vale he gazed,
And held his breath, as if amazed
By all its wondrous loveliness.
For as the sun its depths did bless,
It lighted up from side to side,
A close-shut valley, nothing wide,
But ever full of all things fair."

Not a few experienced travelers have pronounced the Glacier Point view the grandest sight on earth. It is one that every visitor should see, for from this point his eye may range over all of the more striking glories of Yosemite. Fortunately, the day is perfect, clear as crystal to the very verge of the horizon. Well might one yield himself up to silent amazement as the scene slowly possesses him, for he will be totally unable to grasp its full grandeur in a moment or even in an hour. There is a vague impression of vastness and beauty, but it is some time ere the mind is able to dwell on the details and to analyze the marvelous land-scape into its component parts.

Nearly a mile below lies the narrow green vale, its giant pines seemingly shrubbery, its streams the merest threads of silver, the hotel a child's toy house, Mirror Lake a dot of light —vet all is remarkably distinct in the lucent daylight; distance has only lessened the size and scarcely dimmed the form. Just opposite one sees the white swaving ribbon of Yosemite Fall; to the right rises the tremendous bulk of El Capitan, which suffers little from the distance, and towering just behind this is Eagle Peak. A still grander view greets the eve as one turns to the left and gazes up the valley. The dominating feature is the rounded white summit of Half Dome, for its bold situation in the foreground gives the impression of greater height than the still loftier Clouds Rest just behind it. One is quite overwhelmed by this weird glistening mountain, so strangely different that it seems as if some titanic architect had planned and reared the stately dome as the crowning glory of his gigantic palace. When the eve at last breaks away from the fascination of this strange peak, it ranges over an undulating sea of mountains—the high Sierras, which today stretch away sharp and clear to the horizon. A few billowy cumulus clouds, like cameos



VERNAL FALLS, YOSEMITE VALLEY Courtesy Southern Pacific Railway



against the deep azure of the skies, float just above, their intense whiteness outshining the flecks of snow vet lingering upon the higher altitudes. Vernal and Nevada Falls may be seen in the foreground, white pillars standing sharply against dark masses of rock and pine trees—but why continue my futile effort to set forth the glory of Glacier Point panorama in words? It has never been done and never will be done. Only a visit in person will suffice and, fortunately, such a visit may now be made with little danger or fatigue. Only, one should plan to go no further for the day—surely a dozen hours are little enough to give to the sublimest view that one is likely ever to see. But we were not so wise, and mayhap must return again to Glacier Point

Ш

TO THE MARIPOSA GROVE

Our driver cracks his whip over his four lusty mountaineers and cries, "All aboard!" The fussy old lady manages to delay the start for a quarter of an hour—meditating under a tree in her excuse—and the driver, a somewhat taciturn fellow at best, starts off in a rather ill humor. We sit beside him on the high seat, but it is some time before he relaxes to tell us something of the legends and curiosities of the great Sierra forests through which he has been driving for twenty-five years. It is indeed a marvelous drive, the twenty-six miles from Glacier Point to Wawona, though in retrospect the many wonders of the Yosemite and the big trees may leave a somewhat tame impression of this really delightful stretch of country. Nowhere in America are there finer or more beautiful individual pine trees-great arrow-straight shafts six to ten feet in diameter, rising to a height of two to three hundred feet. The sugar



NEVADA FALLS, YOSEMITE VALLEY Courtesy Pillsbury Photograph Co.



pine, with its golden bark and coat of silvergray needles, is perhaps the most beautiful, and takes its name from the sugary gum that exudes from a cut or crack in its bark. The fine yellow pines are also noticeable, rivaling the sugar pine in size and beauty. There are many other varieties of conifers in the Yosemite forests, of which the Sequoia is the largest and most famous. However, one sees none of the latter along the road to Wawona—these trees are never found isolated among other varieties, but invariably in groups.

Nearly all the pines are heavily draped with a yellowish-green parasitic moss which, while beautiful to behold, is said to be deadly to the trees, slowly sapping their vitality. It first takes hold of the lower limbs—often dead ones—and gradually climbs to the top of the trees, some of which have already yielded to its ravages. "It's been just as common as it is now during the twenty years I have been in this forest," said the driver, "and I guess it can't hurt the trees as much as they claim."

There are many fine deciduous trees and much shrubbery, among which the glistening mountain mahogany and fruit-laden plum trees are commonest. The road, though an old one,

is poor, stony and very dusty, while the ruts and ditches cause the coach to lurch unmercifully. The drive of twenty-six miles in four hours would be easy enough over a fairly good road, but over this mountain trail it is a wearisome one and so much time is consumed in climbing that it necessitates fast going down some of the mountain slopes. It tells heavily on the horses, which appear to be about worn out at the end of the thirteen mile stage, where a fresh relay awaits us.

The last dozen miles of the drive we shall not easily forget. We are somewhat behind schedule and the day is declining. The road steadily descends the mountain, often dropping down sharp declivities or winding-too closely for one's peace of mind-along precipitous slopes that drop darkly through the pines to a rock-strewn stream far below. Down we go. the horses on a sharp trot and the coach swaying and plunging behind. One has to admire the skill of the driver, who keeps his four closely in hand, making each horse do his share of the work, carefully guiding them and often saving them from an apparently disastrous stumble. We are already sore from the trail trip of the morning, but that was as nothing compared with

this coach ride. We hardly note the glorious sunset vistas through the pines by the roadside—often far-reaching over forest-clad peaks which stand in sharp relief against the glowing sky, while a soft blue haze half hides the valleys.

Night comes on before we reach our destination and it is an hour or two after sunset when the lights of Wawona finally glimmer through the trees. We descend from our perch with difficulty and welcome indeed is the open-handed hospitality of the well-ordered inn. There are several cottages besides the main hotel building, all situated in beautifully kept grounds with fountains and flower-beds. Everything is strictly modern and first-class. At breakfast mountain trout is served, which is the only time we have this delicacy—erroneously supposed to be a common article of diet at the inns and camps of the valley.

The genial landlord tries to dissuade us when he learns that we expect to visit the big trees and return to El Portal on the next day. To do this we must rise at five and accomplish a stage drive of fifty miles over roads rather worse than any we have yet traversed—truly a strenuous program to follow upon such a day as we have just finished. It would have been more

sensible to remain another day at Wawona, to see the big trees at our leisure and take one or more of the interesting drives in the neighborhood. The round trip from the hotel through the big tree grove is seventeen miles, and this of itself would be quite enough to occupy the day if time permitted; one should spend hours under these primeval titans and perchance something of their mystery might be dispelled and somewhat of their majesty enter the soul. But our tour through the wonderlands was carefully planned in advance—we must go on schedule. We know now that this should never be done. give yourself a margin of a week when planning your trip if you intend to make the round suggested in this book.

As I have intimated, one who comes from Yosemite is well schooled in wonders ere he reaches the Big Trees of Mariposa, and the drive from Wawona passes a forest of pines so gigantic that many suppose them the famous Sequoias until better informed. But when one finally enters the charmed circle where the Redwood titans stand and catches his first sight of their cinnamon-colored trunks—twenty feet or more in diameter—all the great conifers previously beheld shrink to the dimension of ordinary

84

telephone poles. And there is no mistaking the Redwood after once seeing it, for it is quite distinctive, both in bark and foliage; one might describe it as a cross between the cedar and yellow pine, for it bears some characteristics of both. Its height, rarely over three hundred feet, is much less in proportion to its girth than that of the pines in general, nor are the highest Sequoias as a rule of the greatest diameter, since the Grizzly Giant, the king of them all, is but two hundred and twenty-five feet high. This is accounted for on the theory that such trees must have suffered numerous thunder strokes in the course of the ages.

Once among the trees, however, one is quite unable to realize their stupendous size. He has, in truth, become so inured to the stupendous by this time that everything has shrunken and it takes the figures of actual dimensions to awaken a true realization of the mighty proportions of these splendid trees. We pause beneath one of them. "The Grizzly Giant," laconically remarks our driver, and it comes to us that we are perhaps gazing on the oldest living thing on this earth of ours; for John Muir, the greatest authority on the Sierra forests, declares that this hoary monarch of the wood has undoubtedly

weathered the storms of upwards of six thousand years. A placard tells us that the diameter of the tree is thirty-four feet, but we must needs nace it around to make sure, and finding it true we can accept the assurance that one million feet of board lumber-perish the thought-could be cut from the Grizzly Giant. No wonder the lumber kings look greedily upon him! A limb one hundred feet from the ground measures seven feet in diameter, and one must think of a tree of this size apart from the Sierra giants to realize what it means. There are three hundred and sixty-five trees in the Mariposa Grove, but Mr. Muir thinks that the Giant is the only one that has reached the zenith of its growth. The age of such a tree must necessarily be more or less a matter of conjecture, but Mr. Muir counted the rings of annual growth on a much smaller one which had fallen and proved conclusively that it had lived upwards of four thousand years. In any event, the Grizzly Giant and his hoary companions were flourishing, hale and green long before authentic records of human history were made, and even before the once accepted date of the creation of the world. A strange sense of awe verging upon reverence creeps over one as he meditates on these impressive facts in the



"GRIZZLY GIANT," MARIPOSA GROVE, CALIFORNIA Courtesy Pillsbury Picture Co.



presence of these splendid trees. All show to some extent the ravages of a fire that swept among them some time prior to their discovery by white men, and which was no doubt responsible for the absence of young trees and undergrowth.

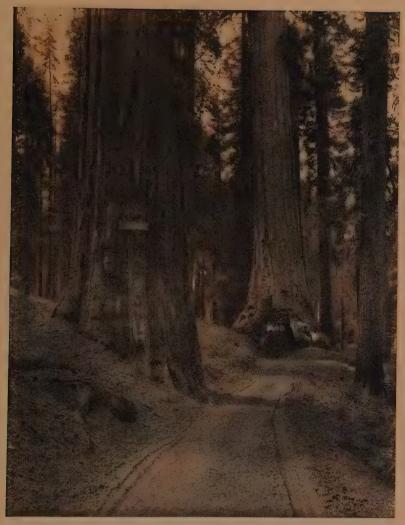
The road winds through the grove, giving an opportunity to view the largest trees at close range. These have been named mainly for the different states, though some of them commemorate the visits of distinguished men, including Generals Sherman and Grant. At one point the road passes through the famous archway cut in the "Wawona," some ten feet square, easily permitting the passage of the coaches. descend and measure our own pygmy height beside the "Fallen Monarch," which succumbed to some cataclysm years ago—a vast prone trunk twenty-eight feet in diameter at the base. One appreciates its great size more fully than that of the standing trees of the same dimensions. We may climb a ladder and walk the entire length of the trunk, which as yet shows little traces of decay. A popular photo shows a coach-and-six using the tree as a driveway—possibly a "fake" of some clever photographer, but it must have cost some effort and ingenuity if the vehicle and

87

horses were really gotten into the position shown in the picture. Just what overthrew this great tree is not easy to conceive. It may have been a terrific storm, though if this were the cause, it is difficult to understand why others of the larger trees were not blown down as well.

There is one of the trees still standing which was hollowed out by fire and one may look at the sky through the trunk, perhaps a hundred feet in height. It is known as the telescope tree, and no doubt someone in almost every party suffers from the driver's wit in being assured that "the stars can be plainly seen through the hollow trunk." "Why, I can't see any," is the invariable exclamation of the curious tourist who strains his eyes up the great black tube. "O, you will have to come at night, of course," gleefully rejoins the driver, none the less enjoying a joke he has repeated daily for perhaps a dozen years.

The discoverer of the Mariposa Grove was Mr. Galen Clark, who at the time of our visit was an old man in his ninety-sixth year, though he was then still hale and strong. He made his home among the great trees, which he loved as friends and comrades, and was delighted to meet the tourists who came to his cabin. He first



"VERMONT" AND "WAWONA," MARIPOSA GROVE, CALIFORNIA Courtesy Southern Pacific Railway



learned of the trees in 1857 from the Indians, whose name for the now famous grove was Wahwonah. Since these lines were written the old pioneer has passed peacefully away, and his last request was that he might be buried among the giant trees he loved so well. No fitter monument could be given him than one of these old friends of his, which bears the name of Galen Clark and an inscription to his memory.

There are many thousands of these trees in different parts of the coast country—John Muir thinks as many as six thousand above fifteen feet in diameter. The name of the species, Sequoia, is that of a Colifornia Indian Chief,—more appropriate indeed than Wellingtonia, which a patriotic English explorer urged for adoption. There are two varieties, the Sequoia Gigantea, usually found in the higher altitudes, and the Sequoia Sempervirens or Redwood, which are more frequent in the lowlands along the coast. These seldom grow to the huge size of the Gigantea—and furnish the redwood lumber of commerce, which closely resembles cedar.

The problem of felling these great trees is a difficult one—a fortunate thing, for that matter. It will be recalled that the section of a

Sequoia, perhaps thirty feet in diameter, was exhibited at the Chicago Fair in 1893. This came from the King's River Grove. Such trees were at first felled by the use of pump augers, with which holes were bored parallel to each other, until the entire trunk was severed, but improved cutting machinery makes the task far easier now. Mr. Hutchings tells of one tree that defied every effort of the lumbermen to overthrow it, although it had been entirely severed; but after some days of fruitless effort a gust of wind brought the giant to earth with a crash while the men were at dinner.

But it is painful even to write of felling a Sequoia. What right has man in a few days to destroy the majesty and beauty that has required fifty or sixty centuries to produce? Several of the groves have fortunately passed under National protection, though some of them—notably this one at Calavaras, sixty miles north of Yosemite and one of the finest of all—are still owned by private parties. The Calavaras Grove belongs to a lumber company, but its distance from railroads has as yet protected it from destruction; it is to be hoped that it will be purchased by the Government and opened to the public. To visit this grove one should go by

rail to Sonora and from thence thirty-five miles by wagon road.

Though the Sequoia trees have never been found outside of a limited area in the Sierras and seldom below an elevation of seven thousand feet, they appear to grow readily and rapidly elsewhere. Mr. Hutchings cites an instance of one of these trees, transplanted to an English nobleman's park, attaining a height of sixty feet and a girth of ten feet in about thirty years. The trees would therefore appear to be admirably adapted to the purpose of reforestation. They are extremely hardy and unless overthrown by some catastrophe or felled by the woodman, live for ages. Of this John Muir says, "They seem to be immortal, being exempt from all the diseases that afflict and kill other trees. Unless destroyed by man, they live on indefinitely until burned, smashed by lightning, cast down by storms, or by the giving away of the ground upon which they stand. The age of the one that was felled in the Calavaras Grove for the sake of having its stump for a dancing floor, was about thirteen hundred years, and its diameter, measured across the stump, twenty-four feet inside the bark. Another that was felled in the King's River Forest, a section of which was

shipped to the World's Fair at Chicago, was nearly a thousand years older (twenty-two hundred years), though not a very old-looking tree. The colossal scarred monument in the King's River Forest mentioned above is burned half through, and I spent a day in making an estimate of its age, clearing away the charred surface with an ax, and carefully counting the annual rings with the aid of a pocket lens. The wood rings in the section I laid bare were so involved and contorted in some places that I was not able to determine its age exactly, but I counted over four thousands rings, which showed that this tree was in its prime, swaying in the Sierra winds, when Christ walked the earth."

IV THE RETURN TO EL PORTAL

We had early luncheon at Wawona and before noon set out on the thirty-five mile drive to El Portal. The day was quite warm and the first dozen miles, being steadily up grade, were covered at a snail's pace. We could not escape the dust which arose in clouds beneath the horses' feet and ere long many of our party would pass for aborigines, so begrimed were their faces. The fussy old lady, still with us, again aroused the ire of the driver. She plied him with foolish questions, to which he grunted unwilling answers. She wanted to know the names of the horses and finally learned that the leaders were "Colonel" and "Walnut." The road sorely tried the animals, which required continual urging and pretty free use of the whip. They were allowed frequent breathing spells, but the driver seemed to think that vigorous applications of the whip and pretty strong language were necessary to keep them going. And, indeed, if

left to themselvse they apparently would have stopped every ten yards in climbing the long grade; but clearly if we were to reach El Portal ere night they must be kept going. This necessity was quite forgotten by the old lady in her sympathy for the weary horses and she continually beseeched the driver to "let Colonel and Walnut rest awhile." Finally when for the twentieth time she had importuned him, he turned squarely around facing her, with—"Madam, I am driving these horses. Will you please keep quiet?" which silenced her for the time being—at least so far as nagging the driver was concerned.

But Colonel and Walnut soon get their rest none the less, for after three or four hours of painful creeping we find ourselves at the thirteen mile station, where we pause for a change of horses. The occupants of the coach are perhaps nearly as weary as the animals we leave behind, but after a ten-minutes' respite, barely time to dismount and stretch one's cramped legs, the crack of the driver's whip is a signal for resuming our journey. So far we have been retracing our way over the road that we followed in going to Wawona, but we leave it at this point and continue on the old Raymond stage road that

94

enters the western end of the valley. The characteristics of the country for the next ten miles show little variation; pine-clad mountains and pleasant vales through which the road winds afford many fine vistas, but nothing that in any way prepares us for the scene that bursts on our vision at Inspiration Point—well named, indeed, for it must surely be a prosaic imagination that does not kindle with enthusiasm at the prospect. "It comes up to the brag," is what Ralph Waldo Emerson said after contemplating it long in silence—or at least that is what the guide books and railroad literature credit him with having said. It sounds strangely unlike our staid and gentle philosopher, whose language we are wont to admire as the finality in polished English. But it express one's feelings more strongly, perhaps, than fine words. We have been led to expect much; they have assured us, and we have often read, that the view from Inspiration Point is surpassed by few panoramas in the world—if indeed by any-for grandeur of mountain, cliff and peak and for beauty of contour and color, and all of these are enhanced by the magic of the hour when we are so fortunate as to see it. The valley lies before us in the soft blue haze of the evening shadows, and its encompassing walls

and towers are kindled with the purple and golden hues of the sunset. As one contemplates the glittering peaks and domes and the ranges of glowing mountains out beyond, he can realize John Muir's characterization of the Sierras as the "Mountains of Light." The grandeur of Inspiration Point seems more of cliffs and spires, of towering walls and mountain peaks, while from Glacier Point one is perhaps more interested in the details of the valley itself. But from either point one may witness a scene that will possess his soul and whose beauty will linger through the years. We regret the necessity which hurries us from the scene, for the pause of the stage coach is but momentary. We have had but a glimpse of a landscape that might well hold one's rapt attention for hours.

But we have come to the most exciting portion of our tour—we begin our ride down the mountainside into the valley. If one is inclined to be nervous, he had better close his eyes and trust to Providence—and the skill of the driver. He will doubtless be safe enough, for there are no recorded accidents, dangerous as the descent seems at the time. The road zigzags in sharp angles and steep grades down the rim of the valley; in many places there is less than a foot



MORNING IN THE HIGH SIERRAS From the Original Painting by Thomas Moran, N. A.



between our coach wheels and a sheer sickening precipice. On we go, the horses in a sharp trot and the coach lunging along the uneven road or swinging around the sharp curves. We pay little attention to the fine views that continually present themselves as we descend—our minds are not free from apprehension by any means—and we find ourselves intensely watching our driver with not a little admiration for his masterly skill. How confidently he handles his spanking four, swinging them in wide circles around the corners, keeping a tight rein that checks many incipient stumbles and encouraging the horses with words they appear well to understand.

It seems a long three miles to the floor of the valley and it is with a sigh of relief that we look up the cliff down which we have been plunging. We pause just at the foot of Bridal Veil Fall and change to the regular coach between the Sentinel Hotel and El Portal. Our journey is not yet at an end, for we have eight miles to go—only eight miles, but we are so tired and travel-worn that every mile is a league. The coach seems barely to creep along the rough road—inches deep with dust, which rolls up in white stifling clouds from beneath our wheels. Surely we must be near our destina-

tion—but the driver laconically informs us that we have five miles still. Five miles!—we have come but three. We settle back in dumb despair, not venturing to ask again. Better the ignorance of hope than the distress of such positive knowledge.

Never was the sight of hostelry more welcome than the huge brown bulk of the Del Portal through the pine trees that crowd around it. Yes, the genial manager can give us rooms with bath, large comfortable rooms on the first floor with every facility for finally separating ourselves from the dust of Yosemite. We come forth to our late dinner, somewhat sore and weary, to be sure, but with a feeling of cleanliness and relief that quite atones for all the hardships of the day. We have been wise enough to take plain old clothes for our sojourn, both here and in the Yellowstone—a precaution which will contribute not a little to comfort and satisfaction, for it would be next to impossible to enjoy oneself in ordinary attire. We have a night's rest too deep for dreams in the Del Portal's capacious beds and in the morning start out on our return trip down the Merced Canyon. The new Yosemite Road runs first-class trains, with parlor observation cars that enable us to see

many picturesque vistas along the river to good advantage.

The valley falls rapidly toward the great level plain surrounding the pretty little town of Merced, and the stream pursues a riotous course for many miles, often breaking into foaming rapids among the huge boulers strewn along its bed. The railway crosses and recrosses it many times—no small engineering skill being evinced in its construction. There are many relics to be seen of the mining operations of half a century ago—in fact, the white man's eagerness for gold was one of the factors leading to the discovery of the valley. One is continually reminded of this activity of

"The days of old,
The days of gold,
The days of forty-nine,"

by abandoned mines at different points along the river. Mines are still being worked in the valley by modern methods, a twenty stamp mill being operated at Mountain King. A little farther is the picturesque Bagby dam, the uncouth modern designation for the old-time Benton Mills, named for Jessie Benton Fremont. To see the Merced

at its best, however, one must come earlier, for late in August the stream is much shrunken, though still picturesque and beautiful.

At Merced Fall the railroad enters the San Joaquin Valley and follows the broad still stretches of the river, which here gives little evidence of its turbulent sources. On every hand are prosperous farms with orchards, vineyards, rich pastures and all the thousand things that make California an enchanted land. In the far distance glisten the silver peaks of the High Sierras, in whose bosom lies the marvelous vale of beauty whose memory will live with us so long as life shall last.



TWILIGHT, YOSEMITE VALLEY Courtesy Southern Pacific Railway



V

GEOLOGY, HISTORY AND GENERAL INFORMATION

The probable geologic origin and the discovery by white men of such a stupendous natural wonder as the Yosemite Valley are full of interest to most of those who visit the place. What tremendous convulsion of nature produced this deep narrow rent in the serried ranks of the High Sierras ages and ages ago—so long that the angles have been softened and the debris clothed with verdure and gigantic trees wherever these hardy adventurers can find a footing in the rocks? Scientists have advanced many theories, more or less plausible, to account for the strange phenomenon. Perhaps, they said, it was some titanic earthquake caused by volcanic action in pre-glacial days that split the mountains in twain and time made the floor of the valley by filling the rent with detritus. Perhaps some strange subsidence here prolonged through ages formed the valley and it may be that such subsidence

still is going on. Or did some torrential river gradually erode this deep pass through which the Merced now courses? These and other conjectures have been advanced, but latterly the trend of opinion is in favor of the theory of glacial erosion—that in time too remote to be conceived a great mass of ice a mile or more in depth ploughed its way toward the sea, rounding and polishing the granite peaks into the glittering domes which we see today and grinding and cutting the deep fissure that now forms the valley. All of this is incomprehensible to the layman's mind, but the geologist finds conclusive proof of the theory. Professor LeConte, the greatest authority on this question, reminds us that a thousand years are as a moment in the history of geologic action: if time enough be allowed we may account for the condition now existing in Yosemite. Clear evidence of glacial action is found in many places in the vicinity, and the guide on Glacier Point Trail will not fail to call your attention to polished spots on a boulder at the head of Vernal Fall. This strange rock is many times harder than the granite in which it is embedded; so much so that it now projects nearly six feet above the granite rock around it. Evidences of glacial action may also be seen on

102

the summit of Half Dome, which John Muir declares must at one time have lain beneath a mountain of ice a mile in height. Glaciers, he asserts, have made every mountain form in the whole Sierran System, whose mountain peaks are only fragments of their pre-glacial selves.

So much for its natural history, imposing indeed as compared with the half century since its discovery by the white man. Secluded as it is, deep in the heart of trackless wilds, one may not wonder that its existence was so long unknown even to the mountaineer; but when the thirst of gold aroused the energy and spirit of adventure in the California pioneer, many of the strange beauty spots of the Sierras were destined to be opened to the world. The first glimpse of this valley came to Dr. Bunnell in 1849, when leading a company of Mariposa scouts in search of hostile Indians. He saw the awe-inspiring form of El Capitan from a distance and declared:

"Although I was familiar with nature in her wildest moods, I looked upon this awe-inspiring column with wonder and admiration. While vainly endeavoring to realize its peculiar prominence and vast proportions, I turned from it with reluctance to resume the search for coveted gold; but the impressions of that scene were indelibly

fixed in my memory. I made many inquiries concerning the scenery of that locality, but few of the miners had noticed any of its special peculiarities. A year or more passed before the mysteries of this wonderful land were satisfactorily solved.

"During the winter of 1850-51, I was attached to an expedition that made the first discovery of what is now known to the civilized world as Yosemite Valley, that is 'not only wonderful in depths and heights, but in its carved and water-quarried recesses and mountain walls that exhibit new beauties in every receding angle and cloud-supporting buttress."

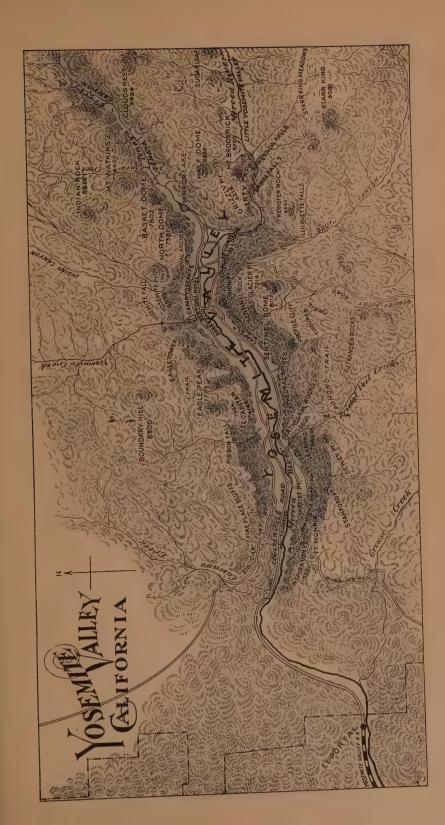
A band of Indians under a shrewd old chief by the name of Ten-ie-ya were immediately responsible for the expeditions that led to the discovery of the valley. Located in the fastnesses of the stupendous walls, these savages imagined themselves safe from pursuit of the white man and proceeded to plunder the settlers who lived in Merced Valley. The expedition referred to above resulted in the surrender of the Indians, who, promising good behavior, were allowed to return with their chief to their haunts in the valley. It was hardly a year afterwards, however, before they were at their old tactics and on

May 8, 1852, they murdered a party of prospectors who entered the valley. Another expedition was sent against them which resulted in the capture and execution of five of the Indian braves The great majority of the Yosemites, however, escaped to the hills and found refuge among the Monos, a tribe friendly to them. This, however, proved their complete undoing, for they learned of a troop of horses which the Monos had stolen from the whites. They immediately planned the spoilation of their friends and pilfered a number of their animals. While gorging themselves on one of the horses which they had killed, the Monos descended upon them and nearly exterminated the tribe, including Ten-ie-va, the chief. This practically ended the Indian troubles in Yosemite

The first tourist party—if we may style it such—was arranged in 1855 by Mr. J. M. Hutchings, whose name will long be remembered in connection with the Yosemite. There were only three of the adventurers in all, and guided by an Indian, they saw the wonders which have since become so famous. Their published accounts were received with some incredulity, though in reality they were rather underdrawn. Mr. Hutchings was so pleased with the surroundings

that he eventually made his home in this valley and later on became, with several other settlers, the occasion of much legal entanglement as the result of the donation of the Yosemite to the state of California by Act of Congress. This act took no account of the rights of the settlers who had made their home in the valley and for a time they were threatened with ejectment. Mr. Hutchings made a trip to Washington in their interests and while waiting the action of Congress did much to spread the fame of the great natural wonder by delivering no less than seventy-five illustrated lectures. A law was eventually enacted for the relief of the few people who had made their homes in the valley and Mr. Hutchings continued to reside there until his death, which was caused by being thrown from a mountain wagon in 1902. He published in 1888 a large, beautifully illustrated volume, "In the Heart of the Sierras." which contains much interesting historical and descriptive matter.

As Yosemite and the big tree groves increased in popularity with tourists yearly, it was rightly concluded that the National Government should properly be the custodian of these great natural wonders as well as those of the Yellowstone Park. Therefore, in 1905 the California





THE YOSEMITE

Legislature passed an act receding the park to the United States Government. This covered only the original tract of about forty-eight square miles which had been given to California in 1860, but Congress in accepting the recession in 1906 created a great park of fifteen hundred square miles. This included the big tree grove of Mariposa and much of the fine forest land of the country surrounding the valley. Improvements are slowly being made and it is to be hoped that the National Government will show more liberality in appropriations for road construction. The Yosemite Railroad to El Portal has vastly increased the number of tourists, which now reaches twelve to fifteen thousand annually. An electric road from Raymond to Wawona is projected, which would make the big trees much easier of access and no doubt bring tourists in still greater numbers.

Wild animals in Yosemite are not so numerous, nor are the different species so well represented as in Yellowstone. Bears are not common, despite the very name, Yosemite, which signifies "full grown grizzly." Other varieties are occasionally found, though they are not so tame as the Yellowstone natives. Deer of different varieties are now rarely seen, though

under present restrictions on hunting they are increasing in numbers. Squirrels, chipmunks and woodchucks are common and often amuse the tourist by their fearless antics.

Snakes are found in all parts of the park. Our guide pointed out a spot where he had killed a rattler a day or two before on Glacier Point Trail. They are not common, however, and there is no record of a tourist ever having been bitten. Of harmless snakes and lizards there are many varieties, including the ugly but innocuous horned toad.

Birds are increasing in numbers, but not many are seen by the casual tourist. Naturally the shy songsters prefer the retired woods and to see them one would have to linger and explore nooks and corners. Water fowl often come in season but do not stay long, and John Muir relates that he has seen wild geese exhaust themselves by evident miscalculation of the height of the cliffs and finally leave the valley by the river canyon. Mountain quail, blue grouse and sagecock frequent the pines, though seldom on the routes of tourist travel. Of songbirds there are the endless varieties common in the California land of sunshine, the robin, thrush, finch and the brilliant oriole being the oftenest heard. Many

THE YOSEMITE

species of humming birds are found among the flowers, fairvlike creatures with iridescent plumage, darting about like sunbeams. Many varieties of the birds nest in the valley in summertime and now rear their young in comparative safety, the predatory animals such as the coyote and skunk having been nearly exterminated.

Hunting is of course strictly prohibited: firearms are not even allowed in the park without special permit from the authorities. As a result of this wise provision, the wild animals and birds are increasing and becoming constantly less shy. Fishing is permitted with hook and line only and affords very good sport in many of the streams.

Yosemite may now be easily reached at any time of the year and a local writer declares that each season has its advantages. "Yosemite can be visited all the year round, and each season has its own special delights. In the spring the meltting snow turns the streams which feed the waterfalls into torrents, and the down-rushing water is in full volume; on every side are rivulets, leaping cascades and reverberating waterfalls; in the summer the highest trails are accessible, the weather is delightful and the whole atmos-

> Santa Clara County Free Library San Jose, Calif.

phere has a mellow, golden quality that at once rests and invigorates: in the autumn the air is clear, every outline and wonderful profile of rock and crag, of giant column and massive dome, stands out as though etched against the sky, the leaves are gently fading through innumerable shades of green and red and bronze—it is the artist's paradise of color; and in winter, with the valley floor hidden beneath a snowy cover, with red snow plants thrusting their way through the white surface like tongues of flame, with every tree and plant drooping gracefully under its wintry burden, with marvelous icicles, like great stalactites, hanging from tower and pinnacle and over-arching rock, who shall say which is the best time to visit this wondrous garden of the Sierra?"

But, after all, if one can choose his time, the early summer is no doubt best. In May the streams are usually at high tide, but some of the trails are likely to be closed by snow. By the middle of June these will be open and a considerable volume of water still coming down the falls. But if one can plan two visits—certainly none too many for such a wonderland—let him come late in April and make a round of the

THE YOSEMITE

valley itself. Then he will see the riotous Merced and the lofty waterfalls in all their power and glory. Another trip late in July or August will afford a better opportunity for mountain climbing and visiting the great trees. The rush of the tourist season will then be over and accommodations will average better. In the springtime the air will be cool and bracing and bring wraps in demand, while in late summer the heat is sometimes intense. Linen dusters and broadbrimmed straw hats are then most serviceable and in no case should one forget a pair of auto goggles. Without these the eyes are likely to suffer much; smoked or slightly tinted glasses are best. Old clothes that one doesn't care for are most serviceable, since any good attire would speedily be the worse for mule-back climbs and long dusty coach rides. In season, during May, June and July especially, transportation facilities are likely to be inadequate and hotels and camps greatly crowded, so one will be more comfortable if careful planning in advance is done and reservations definitely made.



The Grand Canyon







THE INNER GORGE, GRAND CANYON From the Original Painting by Thomas Moran, N. A.

The Grand Canyon

I A FIRST GLIMPSE OF THE GRAND CANYON

If the Yellowstone leaves a predominating impression of weirdness upon the mind—and the Yosemite of beauty—what shall we say of this vast Arizonian chasm where weirdness strives with beauty for the mastery? It is so unlike anything else on earth that the most hardened traveler is unprepared for its revelation: nowhere else has he seen-or may he see-its match for strangeness and beauty in color and form. Here the Architect Divine planned a succession of pyramids and palaces of overwhelming immensity and past human imagining in their ever-changing riot of color. Here the artisans of the ages, fire and wind and flood, have wrought an endless array of gigantic structures which no mortal mind could have conceived and no mortal hand have reared. The memory of it is as the memory of some splendid but fantastic dream and at times it is hard to convince

myself, who have seen with my own eves this crowning wonder of the American West, that it has existence in reality. And I hesitate to attempt the task of portraving its marvels in words, knowing that I must fail as all before me have failed to a greater or lesser degree to measure up to the grandeur and beauty of the scenes I would describe. But I shall have the great advantage of supplementing my words with Mr. Moran's splendid pictures, which perhaps come nearer than any other agency to bringing the scenes of the Grand Canvon to the eves of those who have never visited it, and in this particular, at least, I have ample warrant for my venture. If words and pictures combine to turn the feet of the appreciative American traveler to one of the most soul-inspiring works of nature in our own land, it is enough.

The California Limited, on the Santa Fe Trail, brings us early to Williams, where we linger an hour or two about the Fra Marcos, an inn that gives the sensation of pleasant surprise that the wayfarer nearly always experiences when he first becomes the guest of a Fred Harvey hotel. It is a long, low building with stuccoed walls—a monotone of friar's gray quite in keeping with its name, and it has a pleasant

colonnade fronting directly on the railway tracks. One finds the spacious lobby homelike and cheerful, bright with the coloring of Navajo rugs and Indian pottery; the private rooms are immaculate in their cleanliness and supplied with every convenience, and the dining-room service measures up to the famous Harvey standard. There is the usual curio room with the thousand and one trinkets in Mexican jewelry and all the quaint and charming handiwork of the aborigines of the Southwest. It is a pleasant place to linger about and we hear with little concern that our train is to be an hour or two behind schedule in leaving for the Canyon.

And when it does leave it proceeds rather slowly through a wide sunlit plain, pale green from recent rains, though here and there flaming with the crimson and golden glory of strange wild flowers. There is in the sixty miles but little of diversity—no hint of the tremendous spectacle that is shortly to greet our vision. As we approach our destination we enter a forest of towering pines, amidst which stands the unpretentious station. It is but a few minutes' walk to the hotel—for we have elected to stop at the El Tovar—and as we enter its wide rustic veranda we catch a fugitive glimpse of a vast red and

purple abysm—the Grand Canyon of the Colorado River. But it is only a glimpse, and we hasten into the hotel to attend to the necessary formalities. The room assigned us opens on a balcony from which we get our first extensive view of the Canyon, which lies before us clear and sharp beneath the cloudless noonday sky. A dozen miles away the opposite rim rises like an alabaster wall above the predominating reds and yellows of the lower strata.

The sweep of our vision covers hundreds of square miles of the Canvon—an infinity of mountains, towers, domes, spires, strange temples and palaces, glowing with every conceivable color, all marvelously distinct today, distance alone softening the outlines with a thin blue haze. Words can not give any adequate idea of the immensity of the chasm: the Canvon of the Yellowstone might lie quite unnoticed among a dozen rivals: Yosemite, with all its vastness, might be quite lost in this wilderness of cliffs and peaks; the bulk of Mount Washington is no greater than that of some of the prismatic hills that rear their fantastic shapes in vonder abysm below us. All our previous standards of comparison must be revised; we have seen much of the world, but nothing to be fitly likened to this giant gorge.

Who would think the vexed river, seen from rare points of vantage on the rim as a fleck of dull silver in the wide expanse of warmer coloring. a torrential flood almost equal in volume to the Father of Waters? It is hard indeed to form a true conception of bulk and distance, but such comparisons may assist the mind to a truer appreciation of the scene that at first quite overwhelms it. It is only gradually that the individual features of the great panorama come out before one's vision; slowly the weird architectural forms take shape out of the chaos that at first confuses you. You experience a strange feeling of familiarity with some of them—was it in some old volume of fairy tales, some half-forgotten story of India or Egypt or some well-fingered copy of the Arabian Nights that you saw the prototypes of these enchanted palaces? Or did you. perchance, in some previous state of existence, wander among such wondrous forms-now lingering in your soul as the haziest possible memory? And when you learn the fanciful names they bear, you are all the more confirmed in your surmise. Manu Temple, Buddha Temple, Shiva Temple, Temple of Sett, Vishnu Temple, and many other suggestive names show that this dim sense of semblance to strange temples of the

117

Orient has come to other minds than yours.

A longing comes upon you to descend into the vast chasm, to gaze on its many-colored walls at close range, and to look upwards to the stupendous forms now lying so far beneath your eve. It seems an almost impossible aspiration where may one find foot-hold among these beetling walls, and how may he cross those vawning ravines? But it may be accomplished easily enough—the hardy pioneers of the Canyon have sought out several practicable trails to the river and considerable work has been expended to make these fairly safe, though none of them can truthfully be described as easy. The trails are fatiguing at best and hardly to be recommended to persons with much tendency to nausea when on giddy heights, but seldom indeed is there dissent to the proposition that the fatigue of a descent is well worth while. For, indeed, to appreciate the grandeur and matchless magnitude of these temples and palaces, one must go down among them and look upward to them from the depths; to know the awful majesty and resistless power of that sullen river he must stand on its very bank. Missing such an opportunity is not to be thought of.

One party or more, as the case may be—for

no guide is given more than ten persons—is made up daily for the descent of Bright Angel Trail. The trip may terminate at Indian Garden, only four miles distant, or one may proceed as much farther, either to a wide plateau overlooking the river—a comparatively easy jog of two or three hours—or he may lose himself in the black labyrinth of ravines, and trusting implicitly to the knowledge of the guide, come at last to the very brink of the Colorado.

We are soon enrolled in the first trail party to leave the hotel at eight in the morning of the following day. It will take eight or nine hours. they tell us, to make the return trip to the river. We still have the greater part of the afternoon to while away—our train was several hours late and the trail trip is out of question today—and we are urged to join the excursion to Hopi Point, where we should see the rarest of sunsets, for the day has been cloudless and serene and the evening promises equally fine. It is a drive of only four miles in an open mountain wagon with much beautiful scenery on the way. The road winds among tall pines and ever and anon the red and purple glory of the canyon walls flashes through the openings between the stately trunks. We soon find ourselves at our destination, where

we dismount in order to reach the best possible point of view on the rim of the Canyon.

Not elsewhere on this planet do I hope to behold a scene of such overpowering grandeur so softened with ethereal beauty as that which greets my eyes from Hopi Point. We have come at the hour when the wide expanse of the western heavens is glowing with lucent gold, and a marvelous sunset, flecked with crimson clouds, is flooding the wide level plain to the westward with blinding radiance, far too splendid for any words of mine. And if the sunset lends to the characterless plain such unspeakable glory, who may even imagine the effect of the golden shafts of light upon the multitude of towers and spires that fill the vast depression before our eyes? It touches them with burning gold and flames on the endless walls of alabaster on the uttermost margin of the abysm; strange lights and shadows lurk in the valleys and ravines; amber, purple. deep blue, seem to predominate in turn, though all colors are blending and changing momentarily as the daylight declines. It is this peculiar evanescence that impresses you most when you view the Canyon under any condition of cloud or sunshine, mist or snow, or of weird moonlight. There is always an elusiveness and I doubt not

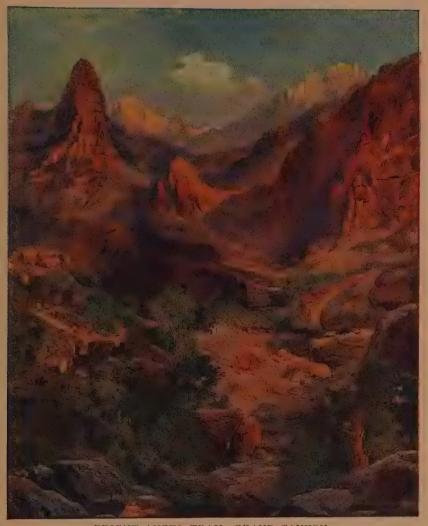
that this strange phenomenon baffles the painter when he would transfer the scenes to canvas—a task for which even the master of them all has confessed himself quite inadequate. A thousand times the scenes seem to be shifted as we gaze at the titanic panorama in the fading light and as the night settles down over the mighty gorge, its strangeness deepens and the predominating impression of beauty which has reigned in the mind of the beholder gives way to a sense of awful mystery.

П

DOWN BRIGHT ANGEL TRAIL

How different is the scene when the day flames out again and all the warmth and color reappear in the stupendous deeps of the great chasm. We are early astir, for our party is scheduled to leave at eight o'clock on the trail trip to the river's edge some eight miles from the Canvon's rim. Bright Angel Trail, which is by far the most popular of the narrow, tortuous descents into the Canvon, takes its name from the creek which joins the Colorado River at the lower terminus of the trail. We find our mules saddled and waiting; they are assigned to us, or we to them, with reference to their size and our avoirdupois. Most of the animals are time-tried denizens of the trails—sedate and sure-footed and would probably take you to your destination and back without the services of any guide at all.

Our conductor is a rather breezy young westerner, with sombrero and bandana of most approved style, and evidently with no mean



BRIGHT ANGEL TRAIL, GRAND CANYON From the Original Painting by Thomas Moran, N. A.



opinion of himself. He rides a horse, for which he evinces all the western ranger's fondness, and having been a cavalryman in the Spanish-American War, he is fully at home in the saddle. Strictly speaking, he is captain as well as guide of the party, and it is his duty to look after the welfare of his charges and see that none of them unduly exposes himself. He has a fund of information and a number of stories and incidents concerning the Canyon which serve to enliven the long mule-back ride.

We find the Bright Angel descent far more strenuous than the Glacier Point trip in the Yosemite—more difficult by odds than we anticipated. A series of steep zigzags, often winding along the verge of vawning precipices, makes one shudder as he thinks of the results of a single misstep—but the mules do not make missteps and the chapter of accidents to tourists in the Canvon is short indeed. The descent begins at Bright Angel Inn, a half mile from El Tovar. Like all trails to the Colorado, it is more or less a natural pathway, having been used for ages by the Indians, though in places it has been rendered easier and safer by well-directed work. This is especially noticeable for the first half mile, where the skill of the engineer is plainly evident. The

canvon walls are almost devoid of vegetation. though a few gnarled and stunted pines have found foothold and coarse grasses and cacti with leaves like stilettos appear at intervals. As we descend and are able to view the strangely eroded forms from a lower level, the resemblance to architectural structures becomes more pronounced. Yonder rises Shiva Temple, the dominating pile of Bright Angel Trail, wonderfully symmetrical in form—an oriental palace of gigantic dimensions built of intricately carved stone and surmounted by a pinnacled dome of light vellow. Truly, it seems as if one might enter its awful portals and come into the hall of some potentate of giant stature amidst surroundings of barbaric splendor, a fit ruler for the enchanted land in which we sojourn today. The trail descends rather sharply until it passes the red sandstone strata: when it enters "Boulder Bed" it becomes comparatively easy and sighs of relief from the party are not uncommon. For the next mile we wind among huge blocks of stone, strangely fantastic in contour and color, which at some remote period have tumbled from the canyon walls. Here the ground is clothed with verdure and, in season, starred with wild flowers, among which dart the lithe, brightly

colored lizards and swifts. We can breathe easier now and contemplate the marvelous scenery without the anxiety that forced itself upon us when we rode along the edge of precipitous slopes.

There is a refreshing midway pause at Indian Garden, where we may drink and fill our canteens from the clear stream whose waters give life to the little garden which has been planted by the family living in the cottage near at hand. Some years ago a stone structure to be used as an inn was begun here, but it was never finished and fell into ruin; one would think it would not have lacked guests—it would indeed be a rare experience to pass the night amidst such surroundings.

After a few minutes' rest at this pleasant spot, we are again in the saddle, but our party divides. Some prefer the trip to Indian Garden Plateau, where by an easy route one may indeed come to the river bank, but it is a bank some thousands of feet above the stream itself. But most of us decide in favor of the far more strenuous trail which leads through an interminable labyrinth of granite-walled ravines to the very margin of the untamable Colorado. The rugged walls shut out the view much of the time, though

through the occasional openings we still catch fugitive glimpses of the vast blood-red palaces that now tower far above us, sharp against the sky. Our path follows the graveled beds where the torrents pour downwards to the river when heavy rains fall; but the courses are now nearly dry and marked by mere trickling streams. At times our path seems to end abruptly against a black insurmountable wall—but our guide turns into a narrow defile that leads on still downward -downward. There are places where the path clings precariously to the side of a cliff, rising hundreds of feet above and dropping as many hundreds sheer below us. And worst of all is the Devil's Corkscrew—for his satanic majesty has almost as many possessions in the Grand Canyon as in the Yellowstone; we do not hear so much of him in the elvsian vale of the Yosemite, thank heaven. But the Corkscrew is rightly named, whether the devil has aught to do with it or not. Our guide calls to us to dismount. No one is permitted to ride down this frightful natural winding stair, which carries us almost two hundred feet near the level of the mysterious river which we are seeking. We have left the zone of brilliant colors; far above us it coruscates and flames against the turquois sky. Our devi-



A BRIGHT ANGEL TRAIL PARTY—GRAND CANYON



ous path now winds among mountainous cliffs of igneous granite, black and forbidding, a perfect labyrinth where the novice might be hopelessly lost.

At last comes the order to dismount, the mules are tethered, and rounding a granite cliff we find ourselves on the shores of the vexed torrent which in countless ages has wrought the wonderland through which it courses. waters are turbid and foam-crested and the granite precipices resound with its sullen roar. The opposite shore seems no more than a stone's throw away, but the missile hurled by the most dextrous of our party falls in midstream-in such stupendous surroundings one is deceived as to the river's width. We gaze at its whirling waters with a strange fascination—there is indeed no match for the Colorado among the greater rivers of the world. Other great streams are the friendly servants of man, affording him means of travel and patiently bearing his burdens. How different the demon torrent that writhes before us—almost inaccessible to man. it resists and defies his puny efforts to subdue its somber waters. The most intrepid explorers alone have ridden its angry waves and they traversed its tortuous course only with un-

paralleled danger and fatigue. Its waters are surcharged with sand and are almost as turbid as those of the Mad Missouri; there is nowhere the crystal and emerald glory of the Yellowstone. It is hemmed in by solid walls of black granite and it rushes over a bed of the same material so hard that erosion now proceeds but slowly, despite the awful force of the torrent. Here and there the waters swirl and eddy around huge boulders, which in some remote time have plunged down from the towering cliffs.

We hardly need the reminder from our guide that the hotel people have provided a picnic luncheon for the party—we are fully ready for the substantial fare which the lunch boxes contain. Water is dipped from the river, and despite its somewhat forbidding appearance, it proves very drinkable, for the sand settles almost instantly.

In an hour our return trip begins. Our mules have patiently awaited us and eagerly begin the upward climb, for they are given no feed during the trip. But their zeal gradually flags under the strenuous work and long before the end is reached they are allowed frequent pauses for rest and no little urging becomes necessary. We dismount both for the Corkscrew and Jacob's

Ladder, and before we reach our destination we are quite as weary as the animals themselves. We cast many longing glances at the flag floating above the rim, a crimson speck against the evening sky, marking the goal of our earnest desire—our comfortable inn. But our weariness of the flesh does not wholly distract our attention from our surroundings, which present many new and pleasing aspects in the course of our ascent. Our guide points out against the face of an almost perpendicular wall piles of rude masonry, once the abode of prehistoric cliffdwellers. It was probably before the Christian Era that these strange beings reared their rude homes in that inacessible spot—a retreat, no doubt, from enemies whom they were too weak to meet in open combat. Holes were hollowed in the face of the cliff and walls of heavy stones were built between these dens and the yawning precipice beneath. A difficult and devious trail led to the dizzy retreat, known probably only to the people who occupied these strange homes. No traces of human occupation now remain except occasional flint arrowheads and shards of pottery.

The upward "trek" seems well-nigh interminable, though in hours it is no longer than

the descent. It is with a sigh of relief that we tumble from our mounts as best we may and limp painfully to the hotel. A warm bath, however, and change of raiment work wonders, and over the polished silver and white linen of the El Tovar one's hardships begin to fade into a host of pleasant recollections.



VIEW FROM TERRACE, EL TOVAR, GRAND CANYON COURTESY Santa Fe Railway

Santa Clara Co Free Library San Jose, Cala



Ш

AT THE EL TOVAR

After dinner everyone responds to the invitation to witness an Indian dance at the Hopi House, which is an exact reproduction of a native pueblo, situated a short distance from the hotel. Before the performance begins the aborigines shrewdly allow the guests plenty of time to look about the house and make such purchases as they may elect from the thousand and one articles offered for sale. There are Navajo rugs in bright and somber colors, Indian pottery and baskets in quaint but often artistic designs, furs, native weapons and trinkets, Mexican filigree work in gold and silver and souvenirs galore in great variety and at all prices. There is also exhibited a fine collection of articles of native manufacture which was the property of Fred Harvey and which includes many individual pieces—especially in rugs and baskets—of great value. In one of the rooms a Hopi woman was busily at work weaving a rug at her crude loom,

thus affording an example of the slow and laborous process by which these fabrics are produced.

Suddenly the weird tattoo of the Indian drums signalled that the promised dance was to begin. A couple of slovenly bucks shuffled out to the center of the floor and began a characteristic native dance, accompanying their uncouth movements with a series of velps and groans. They were clad in dirty woolen shirts and buckskin trousers, the latter hanging so loosely as to appear in constant danger of dropping off. However, no such catastrophe happened and the end of the dance was the occasion for a collection taken by a small aborigine. And this same diminutive native proved a star performer himself: though a mite of only two or three years, as a dancer he was a far greater hit with the onlookers than were his elders, and his efforts were greeted with a shower of nickels and dimes. The dancers continued their gyrations until the contributions finally failed and it was thereupon intimated that the evening's entertainment was closed

Just outside the Hopi House are several native dwellings or hogans, as they are usually styled, queer semi-spherical structures of adobe and stones, about a dozen feet in diameter and



NEAR EL TOVAR, GRAND CANYON Courtesy Santa Fe Railway



six or seven in extreme height. A semi-circular hole through which the occupants crawl serves as a doorway. There are no chimneys, the smoke finding its way through a small aperture in the top. In appearance and construction these odd primitive dwellings closely resemble the "igloos" of the Esquimaux, except that in the former "adobe" takes the place of snow.

As we return to the hotel we pause to again contemplate the mysterious deeps of the weird chasm where ghostly forms and dark shadows seem to struggle with the fitful moonbeams—and behold another phase of its ever-changing and indescribable beauty.

The El Tovar is brilliant with myriads of electric lights, for this unique palace in the wilderness has every modern improvement and convenience. It is a somewhat rambling building of huge proportions, constructed of native logs and boulders, though the plan is hardly so happily conceived or so well carried out as that of the Old Faithful Inn in the Yellowstone. Perhaps it has less of the genuine atmosphere of the wild about it. It is named in honor of the old-time Spanish conquistador, Don Pedro del Tovar, whose memory is linked with the discovery of the Grand Canyon by Coronado's

soldiers in 1540—in 1540! Strange indeed that this remote marvel, so far inland, should have been seen by white men within fifty years after the discovery of America! There are few more magnificently situated hotels in the world, the mighty pines of the Coconino Forest sweeping away to the rear and directly in front, in plain view from the spacious veranda and from many of the rooms, the weird glories of the Canyon.

And it has the Harvey service, which means that its cuisine is unexceptionable, for in the Southwest the name Harvey has become synonymous with excellence. The founder of the Harvey system of hotels and eating houses is no longer living, but his spirit still prevades his institutions, and just how exacting that spirit was is well illustrated by an incident related by a lady who once acted as stenographer for Fred Harvey himself. She said it was his custom to visit his dining-rooms wearing a newly laundered pair of white gloves and to pass his hands over the sideboards and tables. Even the windowsills and casings underwent similar tests and woe to the responsible parties if the white gloves showed traces of dust!

The El Tovar dining-room is of huge proportions—a rustic hall some forty by ninety feet



MIST AFTER RAIN, GRAND CANYON From the Original Painting by Thomas Moran, N. A.



with massive log-trussed ceiling and two capacious stone fireplaces. If fortunate enough to secure a table near one of the large windows the guest may regale himself with a panorama of the Canyon as well as the appetizing bill-of-fare.

It is not strange that the Grand Canyon country has been the mecca of many artists, and it is therefore appropriate that the El Tovar should have a picture gallery with many excellent paintings of local scenery. In the rotunda hangs an original by Mr. Moran, one of his most important canvases, and somewhat similar in composition to "Mist After Rain," which adorns this book. Mr. Moran's name is familiar to the hotel people, for he has been a frequent guest. though much of his work was done here before the day of the El Tovar. He came hither in the days of the stagecoach and made journeys, often tedious and wearisome, to all the more picturesque points of the Canyon. His own words concerning the great natural wonder which he has done so much to bring to the eyes of his fellow-countrymen may be fitly given here. Following an earnest appeal for "Nationalism in Art," in which he shows the opportunities afforded the American painter by the scenery of the Great West, he continues:

"On a recent visit to the Grand Canyon of Arizona, I was more than ever convinced that the future of American art lies in being true to our country, in the interpretation of that beautiful and glorious scenery with which nature has so lavishly endowed our land.

"My chief desire is to call the attention of American landscape painters to the unlimited field for the exercise of their talents to be found in this enchanting southwestern country; a country flooded with color and picturesqueness, offering everything to inspire the artist and stimulate him to the production of works of lasting interest and value.

"This Grand Canyon of Arizona, and all the country surrounding it, offers a new and comparatively untrodden field for pictorial interpretation, and only awaits the men of original thoughts and ideas to prove to their countrymen that we possess a land of beauty and grandeur with which no other can compare. The pastoral painter, the painter of picturesque genre, the imaginative and dramatic landscapist are here offered all that can delight the eye or stir the imagination and emotions.

"With truth and perceptions of a poet, Mr. Higgins has described the Canyon as 'An inferno



THE INNER GORGE, GRAND CANYON COURTESY Santa Fe Railway



swathed in soft celestial fires, unflinchingly real, yet spectral as a dream. It is the soul of Michael Angelo and of Beethoven.'

"Its forests of cedar and pine interspersed with aspens and dwarfish oak are weird in the extreme; its tremendous architecture fills one with wonder and admiration, and its color, forms and atmosphere are so ravishingly beautiful that, however well traveled one may be, a new world is opened to him when he gazes into the Grand Canyon of Arizona."

It would be strange, indeed, if such a stirring appeal should pass unheeded, and as a consequence the Canyon region is being increasingly frequented by painters of note; George Innes, Jr., Elliott Daingerfield, Edward Potthast, De-Witt Parshall, the late G. H. McCord, and other distinguished representatives of American art have been among the visitors of late years. Perhaps from among these pilgrims of brush and palette may come forth a fit successor to the master who first brought to the eyes of the world the marvels of color and form that exist in this enchanted land.

We find ourselves loath to leave this region of beauty and wonder—we know that at best we have had but a passing glimpse of its glory; a

sojourn of many months would not suffice to visit the accessible points of interest or to witness all of the innumerable phases of beauty consequent upon the mutations of the seasons and the weather. Much of the grandest scenery of the region is some distance from El Tovar. Of the Virgin River, more than a hundred miles to the southwest. Thomas Moran writes:

"The Canvon of the Rio Virgin is without doubt the grandest and most beautiful of all the tributary canyons of the Colorado River. In the walls of this canvon are found vast amphitheatres: titanic pinnacles rise from its depth. exquisitely storm-carved and painted by nature in endless variety of colors." And this is only one of many localities well worth the tourist's while, but only to be reached by slow methods of transportation requiring time and patience and often entailing not a little fatigue and inconvenience. As a member of a congenial party, with guides and camping outfit, one would no doubt secure the ideal method by which to explore the less frequented spots of the canvon region. Such excursions may be arranged for at El Tovar, since it would hardly be practicable for the tourist to supply his own equipment.



ROCK TOWERS OF THE RIO VIRGIN, GRAND CANYON From the Original Painting by Thomas Moran, N. A.



IV

THE DISCOVERY AND EXPLORAION OF THE GRAND CANYON

The history of the connection of civilized man with the Grand Canyon is a strange one and reads like the pages of some fanciful romance. As intimated previously, the first white men saw the Canyon in 1540, when Francisco Vasquez de Coronado and his band of treasure-seeking Spaniards stumbled upon it in their search for the "Seven Cities of Cibola," Such was the high sounding title by which they designated a half dozen wretched Zuni villages which rumor had magnified into cities of great wealth and magnificence, where the gold-crazed Spaniards hoped to repeat the scenes of plunder and rapine enacted by Cortez in Mexico. The great chasm, with its mysterious river, interposed an impassable barrier in their path and they turned backward without having been able to find any descent leading to the shores of the stream. Their tales of the awe-inspiring spectacle which

they had beheld were received incredulously and gradually faded into dim tradition. It was not until 1776 that mention is again made of the Canyon, when a Spanish priest in course of his wanderings came upon it and found a practicable crossing at a point still known as "Vado de los Padres." In the next eighty years an occasional visit is chronicled, but it was not until 1857 that an official expedition under Lieutenant Ives was despatched to the Canyon. The establishment of military forts in New Mexico and Utah made it desirable to use the Colorado as a waterway, and it was with this object that the explorers began their voyage at the river's mouth. They had a side-wheel steamer which could ascend no farther than the mouth of the Virgin River, where it became clear that the wild waters of the Colorado could never be converted into an avenue for transportation or commerce.

These meager annals constitute the history of the exploration of the Colorado up to forty or fifty years ago. In 1869 Major John Wesley Powell with a party of ten devoted followers undertook to traverse the entire length of the Canyon in four rowboats. In this he was entirely successful, covering the distance of about two hundred and seventeen miles from Green



CLIFFS OF GREEN RIVER, UTAH From the Original Painting by Thomas Moran, N. A.

River to the mouth of the Rio Virgin in thirty days. The story of this voyage reads like a romance; it seems almost impossible that such a small party should have been able to accomplish the journey in the frail wooden boats. The river was an absolutely unknown quantity; the bold explorers were in constant danger of destruction, not knowing what moment the boats might plunge over a cataract or be dashed to pieces in some raging rapid. The undertaking met with words of discouragement on all sides from those who best knew the Colorado: the Indians and white trappers and hunters most familiar with the Canyon insisted that there were dozens of rapids where no boat could possibly live. It was widely believed that in many places the river disappeared wholly in tunnels beneath the gigantic cliffs that everywhere overhang it. Nothing daunted, however, the intrepid explorers set about their appalling task. Some of the rapids could not be ridden by the boats and were only passed by the laborious process of "portage"-carrying the boats around the rapid or fall. In all there are about six hundred rapids in the portion of the Colorado covered by Powell's voyage. So arduous was the trip that three members of the party became dis-

141

mayed and withdrew from the expedition, despite the protest of their comrades, only by some strange decree of fate to lose their lives at the hands of hostile Indians, while their companions completed the voyage unscathed.

The first trip being largely of an experimental nature—to prove that the thing could be done—Powell arranged the next year for a second expedition to take more accurate observations and surveys. He piloted a party of eleven men in four especially constructed rowboats embodying ideas suggested by his experience on the previous voyage. These boats were of wood, light in construction and so built as to be unsinkable even if capsized. Early in the voyage one of the boats was destroyed in passing a rapid, but the remaining three completed the trip. More time was consumed in this vovage than in the former, the party exploring many of the tributary canyons and taking accurate observations on the topography of the region. Powell, who possessed the soul of a poet as well as the mind of a man of science, has written much of the grandeur and beauty of the scenery which he witnessed on this voyage, and to this day some of his descriptions remain the best that have been penned. Accompanying him

SUNSET, GRAND CANYON Courtesy Santa Fe Railway

was a young army officer, Capt. Fred S. Dellenbaugh, who has since written an exhaustive book fitly styled "The Romance of the Colorado River"—and indeed it is a romance more thrilling than many of the imagination. Dellenbaugh was an artist as well as author and made many paintings and sketches of the scenery. The party also took a large number of photographs, which averaged remarkably good considering that neither the dry plate nor film had yet come into use and that the photographic apparatus was very heavy and unwieldy.

Powell made a number of trips to various sections of the Canyon region during the ten years following his successful voyages down the river, and added much to our geographical knowledge of the Colorado and its tributaries. He says in one of his works, "Since my first trip in boats many others have essayed to follow me, and year by year such expeditions have met with disaster; some hardy adventurers are buried on the banks of the Green and the graves of others are scattered at intervals along the course of the Colorado."

One of the most noted of these expeditions was that of 1889, in which Mr. F. M. Brown lost his life. He was the president of a railroad

corporation which was organized with the idea of building a road through the Canvon. proposed to construct this road from Grand Junction. Colorado, following the course of the Colorado River through the Canyon to the Gulf of California, a distance of about twelve hundred miles. It was thought that such a road would be profitable in supplying the Pacific Coast with coal, but the discovery of an abundant supply of that mineral in the Puget Sound region did away with the chief motive for the proposed enterprise. Since the country along the line would contribute very little support, the principal source of revenue would have to come from tourist travel which at present would be manifestly insufficient to make such a costly undertaking profitable. In passing through the Canvon the road would have to be at least one hundred feet above low water to avoid the floods which come very suddenly from cloudbursts in this region, and much of the way the track would have to be cut in the sides of almost perpendicular cliffs. The idea of building the road was not abandoned, however, upon the death of the originator of the project, which was styled "The Denver, Colorado Canyon and Pacific Railway Company." A year later a wellequipped party of engineers under Lieutenant R.



LOOKING NORTH FROM GRAND VIEW POINT, GRAND CANYON COURTESY Santa Fe Railway

B. Stanton made the voyage down the river and completed the survey. The start was made on the 10th of December and the Gulf of California reached the following April. From his own words one may best gain an idea of the marvelous scenery and exciting adventure of this historic trip:

"It has been the fortune of but few to travel along the bottom of the great chasm for a whole winter, while around you bloom the sweet wild flowers and southern birds sing on almost every bush—and at the same time far above, among the upper cliffs, rage and roar like demons in the air the grandest and most terrific storms of wind and snow and sleet that I have ever witnessed, even above the clouds among the summit peaks of the Rocky Mountains.

"To be imprisoned between the great towering walls, the whole upper country covered with its winter mantle of inhospitable snow, which hanging down hundreds of feet over the rim and in the side gorges gives warning that the only way of escape is over the hundreds of fearful rapids, falls and cataracts below, and through the only open gate at the extreme western end; to dash into and over the huge waves at the head of more than a hundred rapids with

no knowledge that we could come out alive at the lower end; to toil, to rest, to eat, to sleep for weeks and for months beside the everlasting roar of that raging torrent—was an experience that even now brings up memories, feelings and impressions that would require volumes to relate.

"On our second expedition, with our new boats, we ran nearly all of the rapids and portaged but few; over many of them our boats dashed and jumped at the rate of fifteen to thirty miles per hour. To stand in the bow of one of these boats as she dashes through a great rapid with first the bow and then the stern jumping into the air is an excitement the fascination of which can only be understood through experience.

"Starting into the head of one rapid the speed given to the boat by the oarsmen to gain steerageway carried us over the first and second smooth waves so fast that as the boat rose to the top of the last it had not time to turn down, but went on, up and up, and shot clean out into the air, jumping over to and dropping with a tremendous crash upon the third wave. Again, while going over another fall our boat, after passing the crest of the second wave and turning down, did not rise upon the third wave at all but

dove clearly under it, filling completely with water, but thanks to its ten air-tight compartments it in an instant rose to the surface and went safely through the whole rapid.

"In the last section are some of the worst and most powerful rapids, No. 465 being perhaps the worst on the whole river. It is composed of three falls, in all, a drop of thirty feet. The current, turned from one side by large boulders, dashes, after passing over the first fall, against the left cliff, just at the head of the second fall, and is thrown back with awful force, and as it meets the current from the right curls in angry waves fifteen to twenty feet high, first from one side and then from another. From this the whole current is thrown against the right wall as it curves out into the stream just at the head of the third fall." (This is the rapid at which Major Powell's three men left him.)

"It took but a few moments of examination to see that there was no way to get our boats or supplies around this rapid. It must be run. There was no hesitation. Every man went back to the boats and jumped in. They were soon ready for the plunge.

"In a moment we were at the head of the first fall and over or through a half dozen huge

waves and approaching the second fall. As I looked down into that pit of fury I wondered if it were possible for our boats to go through it and come out whole. I had no time for a second thought. We were in the midst of the breakers. They lashed at first one side and then the other. breaking far above our heads and half filled our For a second we were blinded by the dashing muddy water. In another second we were through and out and right side up. I turned to see if the men were safe. They were all in their places; but our boats, though right side up, had been turned quartering with the current, and we were being carried with fearful force toward the right cliff. Every instant I expected to be dashed against the cliff ahead, where the whole current of water was piled up in one boiling mass against the solid granite; but just as I felt the last moment had come, our sturdy Scotch helmsman, Hislop, gave the boat a sudden turn, and assisted by the rebounding waves we went by the cliff and I shouted to the men: 'That's good! That's good! We are past.' But the words were hardly out of my mouth when as we rounded the point of the third fall our boat, picked up bodily by a powerful side wave. was dashed fully ten feet to the right and it



MORNING, GRAND CANYON From the Original Painting by Thomas Moran, N. A.



crashed into a rock which projected from the shore, and stopped. We were all thrown forward. The boat filled with water, sank upon the rock and stuck fast. Wave after wave in quick succession rolled over us. I tried to straighten myself up, when a great wave struck me in the back and I was clear out of the hoat into a whirlpool below the rocks. The force of the blow knocked me insensible for a moment. But as I was drawn down the water closed around my head and my consciousness returned, and as I was carried by that whirlpool down, down, down, I wondered if I should ever reach the bottom of the river. The time seemed an age. The river seemed bottomless. In a few moments I was caught as by two forces—one around my legs and another around my back—and twisting in opposite directions, they sent me whirling away and I shot to the surface some fifty feet down the rapids from where I went in. I caught my breath just in time to be carried under the next great wave, coming out again in a lighter wave at the lower end of the rapids. Thanks to my cork jacket I floated high above the water, but was carried along the swiftest part of the current for near a half mile."

Quite enough to indicate the strenuous,

dangerous character of the voyage—but it was not without reward. What an experience it was to pass the entire length of that stupendous gorge and to view its marvelous panoramas of peaks and palaces under all conditions of weather and at all hours of the day and night—to see the sunrise flaming upon the white walls that stretch along the rim, to see the twilight settle down, weird and ghostly over the gigantic temples, to see the moonlight shed its silver radiance over the enchanting scenes—what grander experience could the human soul enjoy?

But the railroad remains an unfulfilled project—though Lieutenant Stanton expresses the belief that it will one day become a reality. Then and then only may the average man and woman have the opportunity of knowing something of the fantastic beauty that greeted the venture-some explorers in their hazardous voyages down the wild river.

V

OTHER WONDERS OF THE CANYON REGION

One could not close even a cursory description of the Grand Canvon without some reference to the many other strange phenomena that exist in this enchanted region. Among these none are more famous than the petrified forests of Arizona, three of which are to be found in the vicinity of Flagstaff. These may be reached from Adamana Station-in fact, the forests are Adamana's reason for being. The first forest is about six miles distant from the station and the journey may be made in a leisurely fashion in three or four hours, allowing time for inspection of the Aztec ruins and hieroglyphics which are passed enroute. In this forest is the famous natural log bridge, a huge trunk of jasper and agate spanning a chasm sixty feet in width, above a clear tree-fringed pool. The second forest, covering about two thousand acres, is two and one-half miles due south of the first. Here

are many fine trees quite intact, among them the famous "Twin Sisters." The third forest, which is of far greater extent than the others, lies about thirteen miles southwest of Adamana. may be found the largest specimens of petrified trees in existence, some of them being seven to nine feet in diameter and more than two hundred feet in length. The colorings are striking indeed, every tint of the rainbow glowing in the scattered, broken limbs and trunks, while other fragments are clear as crystal. One may easily understand as he views these coruscating blocks of stone, why this forest is locally known as the "Crystal" and "Rainbow" Forest. Besides these is the Blue Forest, seven miles east of Adamana which is noted for the beautiful blue color tones of the petrified trunks. This was but recently discovered by John Muir. The North Sigillaria Forest, in the same vicinity, is peculiar in that many of the tree trunks are still standing, giving a remarkably picturesque effect.

Geologists have advanced many theories to account for these remarkable phenomena, but all are agreed that at some remote period the great forests growing in this region were inundated, perhaps by the sea. It must have been millions of years ago, for it is estimated that some ten

thousand feet of rock was deposited over the trees and this subsequently was eroded clear away, bringing the long-buried monarchs of the forest again to the light of day. This process was well described by Mr. C. A. Higgins, who wrote:

"This region for hundreds of square miles was once sunk so low the ocean overflowed it: then upheaved so high the brine could find no footing. Again a partial depression made it a vast repository of rivers that drained the higher levels, which in time was expelled by a further upheaval. During the periods of subsidence the incoming waters deposited sand and silt, which time hardened to rock. But in periods of upheaval the process was reversed and the outgoing waters gnawed the mass and labored constantly to bear it away. And when these ancient logs were uncovered, and, like so many Van Winkles, they awoke—but from a sleep many thousand times longer—to the sight of a world that had forgotten them, lo! the sybaritic chemistry of nature had transformed them every one into chalcedony, topaz, onyx, carnelian, agate and amethyst."

General attention was first attracted to these forests by the exhibitions at the Chicago

World's Fair of polished slabs and huge trunks of agatized trees and of many small articles made from this petrified wood. To most beholders it was a distinct revelation: few had ever heard of this strange natural phenomenon and many were inclined to be rather incredulous. then, however, the forests have been visited by a yearly increasing number of tourists, and the publication of numerous magazine articles and books have made them fairly familiar to nearly everyone. But even yet the number of Americans who actually see these dead and buried forests is comparatively small indeed; the more to be regretted, for aside from its weird beauty, a strange human interest attaches to these massive trunks transmuted into stone eons ago. What race of men knew the living forest; what strange birds flitted among its swaving branches: what huge monsters browsed and battled in its shade; what cataclysm finally brought low these monarchs—stately pine and giant oak? Here indeed is splendid scope for the imagination. Here is antiquity that makes Egypt and Babylon seem as yesterday. Here the student, the philosopher, and the poet may each find much to instruct and inspire.

Within a radius of eight miles from Flag-

staff may be found the most important ruins of the habitations of the prehistoric cliff-dwellers. These have the greatest attraction for the archeologist, but the casual tourist is also interested in seeing these strange homes of a race whose antiquity probably antedates that of any other of which we have relics in America. A wellinformed writer gives the following interesting data concerning these poor remains of a longforgotten people:

"On the southeast, Walnut Canyon breaks the plateau for a distance of several miles, its walls deeply eroded in horizontal lines. In these recesses, floored and roofed by the more enduring strata, the cliff-dwellings are found in great number, walled up on the front and sides with rock fragments and cement, and partitioned into compartments. Some have fallen into decay. only portions of their walls remaining, and but a narrow shelf of the once broad floor of solid rock left to evidence their extreme antiquity. Others are almost wholly intact, having stubbornly resisted the weathering of time. Nothing but fragments of pottery now remain of the many quaint implements and trinkets that characterized these dwellings at the time of their discovery.

"Fixed like swallows' nests upon the face of a precipice, approachable from above or below only by deliberate and cautious climbing, these dwellings have the appearance of fortified retreats rather than habitual abodes. That there was a time, in the remote past, when warlike peoples of mysterious origin passed southward over this plateau, is generally credited. And the existence of the cliff-dwellings is ascribed to the exigencies of that dark period when the inhabitants of the plateau, unable to cope with the superior energy, intelligence and numbers of the descending hordes, devised these unassailable retreats. All their quaintness and antiquity cannot conceal the deep pathos of their being, for tragedy is written all over these poor hovels hung between earth and sky. Their builders hold no smallest niche in recorded history. Their aspirations, their struggles and their fate are all unwritten, save in these crumbling stones, which are their sole monument and meager epitaph. Here once they dwelt. They left no other print on time.

"At an equal distance to the north of Flagstaff, among the cinder-buried cones, is one whose summit commands a wide-sweeping view of the plain. Upon its apex, in the innumerable

spout-holes that were the outlet of ancient eruptions, are the cave-dwellings, around many of which rude stone walls still stand. The story of these habitations is likewise wholly conjectural. They may have been contemporary with the cliff-dwellings. That they were long inhabited is clearly apparent. Fragments of shattered pottery lie on every hand."

Meteorite Mountain is another natural phenomenon of the region of great interest to the man of science and the lavman alike. Here, it is believed, a meteor-almost a small world in dimensions—once collided with Mother Earth. The hillock is not more than two hundred feet in height and its slopes are studded with a few stunted pines, but it is otherwise quite devoid of vegetation. In the top of this strange mountain is a huge depression, or crater—evidently not of volcanic formation—about one mile in diameter and six hundred feet in maximum depth. The bottom in course of time has been covered with several feet of sand blown in by the desert winds and in the center is a level area of about forty acres.

The theories of geologists who have carefully studied this remarkable hillock are of curious interest. They assert that at some remote

period a gigantic meteor must have struck the earth with a terrific concussion. The Indian tribes, in fact, have a tradition about a huge star falling from heaven, dazzling the earth with its brightness and followed by a terrible shock and darkness. Even to this day the natives regard Meteorite Mountain with awe. The effect of the meteor striking the earth was similar to what follows when a rounded stone is thrown into mud—it buried itself far into the softer earth. heaving up a rimlike circle around the depression. It must have crashed through layers of red and white sandstone, grinding them into powderlike sand that partly fills the crater and covers the slopes of the mountain today, for no similar sand is found anywhere in the vicinity. Smaller meteorites have been found in great numbers in the same locality, ranging from tiny fragments to huge rocks weighing a thousand pounds or more. All of these are non-magnetic. This would seem to indicate that the great buried globe is also without magnetic properties, a fact further evidenced by the failure of the magnetic needle to indicate any great attraction near the spot. In this the great meteor is peculiar, since such bodies usually show strong magnetic properties. The discovery of iron "shale"—dead or

burned iron—near the mountain would seem to indicate that this scaled from the meteor in the cooling process. It has been suggested that when the meteor fell the Canyon Diablo country may have been covered by an immense inland sea, of which there are geologic evidences, and the sudden cooling of the white-hot mass may have caused a multitude of fragments to fly from the main body. It may also be noted as a curious fact that miniature diamonds have been observed in these fragments.

Canvon Diablo, referred to above, is some seven miles distant from Meteorite Mountain. "It is a profound gash in the plateau some two hundred and fifty feet deep and many miles long. It has the appearance of a volcanic rent in the earth's crust, wedge-shaped and terraced in bare dun rock down to the thread of a stream that trickles through the notch. It is one of those inconsequent things which Arizona is fond of displaying. For many miles you are bowled over a perfectly level plain, and the train crosses the chasm by a spider-web bridge two hundred and twenty-five feet high and six hundred feet long, and then speeds again over the self-same placid expanse. In the darkness of night one might unexpectedly step off into its void, it is

so entirely unlooked for."

The natives of this region, their villages, customs, superstitions, traditions and handiwork have much of curious interest to the average tourist, though owing to the time required and rather poor accommodations a comparatively small number visit the Indian Reservations. Some of the towns are on the Santa Fe Line-Laguna, for instance a typical pueblo of about one thousand inhabitants, is plainly to be seen from the train. The natives congregate at the station, offering baskets and brightly colored pottery to the souvenir-seeking tourist. These articles are the staple manufactures of Laguna, and Mr. Moran's picture herewith shows a group of Indians engaged in burning pottery—the village in the background. The whole effect is strangely oriental, the white-walled town seeming more suggestive of Palestine than of the western American wilds

Of the aborigines in the immediate vicinity of the Grand Canyon, the Mokis are most numerous and interesting. It was the "Seven Cities" of this tribe that the early Spanish conquistadors were seeking when they stumbled upon the Colorado River. There are still seven villages in existence, though they are not identical with the



INDIANS BURNING POTTERY, LAGUNA, N. M. From the Original Painting by Thomas Moran, N. A.



Seven Cities of Cibola, whose site is now believed to be Zuni, near the New Mexican border. The Mokis among themselves are known as the Hopi or peaceful people, and their present appellation. which signifies "the Dead," recalls the time when the tribe was nearly wiped out by the ravages of smallpox. The tribe offers peculiar attraction to students of primitive communities and pagan ceremonies as well as to the artist seeking new and strange material. It is only more recently that the ordinary tourist has begun to visit the villages, especially during the period of religious festivities. Of these the Moki snake dance has become world-famous. This is a ceremonial prayer for rain, the snakes liberated after the dance being supposed to carry the petition to the gods of the underworld who in Moki theology have charge of the weather. During the dance hundreds of reptiles, many of them the deadly desert rattlesnakes, are fearlessly handled by the performers. To the onlooker it seems impossible that the dancers can escape deadly wounds, but no instance of such injury is known. The opinion of scientific observers is that the Indians avoid danger by their extreme dexterity in handling the reptiles, which amounts almost to sleight-of-hand. It is also claimed that the

priests possess an antidote for snake bite, but they are said to be extremely reticent on this subject. Another ceremony which has the same object as the snake dance—bringing of rain—is the flute dance, said to be a really poetic conception, with picturesque costume and ritual, and full of impressive beauty. Visitors are apparently welcome at these strange ceremonies and no attempt is made to turn them into money-making schemes, as might easily be done were the Indians so inclined.

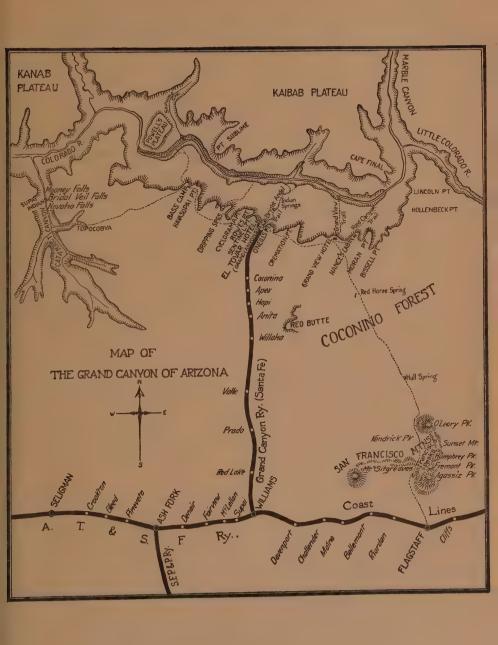
The Moki pueblos are perched on the summits of lofty mesas-a defensive measure which in early days rendered them quite inaccessible to their enemies, though easier paths have been constructed in recent times. No doubt the instincts of the old cliff-dweller still linger in the Moki-for he tenaciously clings to the old-time practice of building his villages in high localities. The women from long usage seem to think it little hardship to toil up the steep trails with water from the spring below and the men returning from their fields after the day's work take the long climb as a matter of course. The Mokis are industrious and thrifty, orderly, and not without a certain sense of humor. They hospitably receive all respectful visitors who may

come at any time, though of course the season of the strange ceremonies we have described attracts the greatest number. The Santa Fe Railway has published a very interesting book on these Indians and their customs, written by Prof. George A. Dorsey of the Field Columbian Museum, who has been a close student of the primitive tribes of the Southwest. Another very excellent work is "North Americans of Yesterday" by Mr. F. S. Dellenbaugh, whose book on the Colorado River we have already referred to.

In enumerating the marvels of the Grand Canyon region, one must not forget the San Francisco Mountains, whose snow-capped peaks rise some six thousand feet above Flagstaff, or thirteen thousand feet above the sea level. The summit of Humphrey's Peak may be reached by a ten-mile horseback ride—much of the way through a park of magnificent pines. The gradient is easy and many splendid vistas break on one's vision in course of the ascent.

The view from Humphrey's Peak is celebrated as one of the noblest on earth. It covers a teritory, distinctly recognizable, of no less than thirty thousand square miles—an area near the average of that of the States of the Union. And out beyond this, beyond the definite circle

of vision, lie leagues of soft shadowy contours of hills and mountains. Due north the eve catches a warm glow of color, the farther wall of the Grand Canvon at Bright Angel Amphitheatre, fifty miles away, and above this Kaibab Plateau and Buckskin Mountains, some forty miles farther. Two hundred miles to the right rise the Navajo Mountains near the Colorado state line. To the northeast, spread out like a brightly-colored canvas, lies the Painted Desert, glowing with every hue of the rainbow, and bevond this the Navajo Reservation. Still farther, surprisingly distinct through the crystal-clear desert air, are the Moki villages, perched on the beetling crags. Eastward a broad desert plateau sweeps away to the Navajo Springs, one hundred and thirty miles distant, and just south of this rise the ghostly forms of the White Mountains. To the south lies Mogollon Plateau. starred with a dozen glittering lakes-so unlooked for in this arid land that one thinks involuntarily of the mirage—while out beyond these the dim blue forms of the Four Peaks and Superstition Mountains, one hundred and sixty miles distant, are silhouetted against the horizon. The Bradshaw Mountains are one hundred and forty miles to the southwest: Granite, near Pres-





cott, one hundred miles, and Juniper Range, one hundred and fifty miles. Westward, sweeping over arid plains, vision is supposed to terminate near the California boundary. To the northwest beyond the Colorado River, east of the Nevada line, are the Hurricane Mountains, so distant that they shrink to purple hillocks. Near at hand one sees the Coconino Forest: on the east the little Colorado, traceable by its fringe of cottonwoods; beds of black lava, Sunset and Peachblow Craters—dark, cinder-capped cones; Oak Creek Canvon and the Jerome Smelter Works a little to the southwest. Just beneath one's eve lies the picturesque, clean-looking town of Flagstaff, while near at hand rise the neighboring mountains, Bill Williams, Sitgreaves, Kendrick's and the over-mastering bulk of San Francisco Peak

The round trip to the Peak is generally accomplished in a day, but one may arrange to pass the night upon the summit if determined in advance—a plan that affords the opportunity to witness the glories of sunset and sunrise from this sublime vantage point.



Other Wonders of the American West





TOLTEC GORGE, COLORADO
From the Original Painting by Thomas Moran, N. A.



Other Wonders of the American West

I am well aware that in these monographs concerning the Yellowstone, the Yosemite and the Grand Canvon I have given by no means an exhaustive catalogue of the wonders of the great American West. To go into detail in describing the marvels of the vast section of our country of which the Rocky Mountains form the eastern boundary would require many volumes even if the story were told only cursorily. In Colorado alone there is a world of beauty and grandeur. Pikes Peak-the American Rigi: the Garden of the Gods-that wonderland of wind-worn stones which take a thousand fantastic forms; the Mountain of the Holy Cross, with its solemn emblem graven in the eternal snows; the Royal Gorge, the Toltec Gorge, Black Canyon and Grand River Canyon, with walls rising two thousand feet almost sheer, and numberless other phenomena not less interesting may well engage the attention of the tourist.

And who by mere words can convey any hint of the charm of the land of flowers and sunshine, California, toward which our longings turn almost whether we will or no and where—some time—we hope to dwell ourselves? What save our senses can bring any true realization of the languorous beauty and awe-inspiring majesty of the limitless ocean, whose blue waters ripple over golden beaches or sparkle under towering cliffs along all the thousand miles of sinuous coast that marks our western boundary?

As for myself, I can find no words to describe the mingled feelings that the sight of the Pacific Ocean never fails to arouse in me. Indeed, one may say that he can see but a little of the ocean at one time, and so far as our limited vision goes, the Atlantic, the Mediterranean, the Mexican Gulf or the Pacific have no distinguishing marks. And yet what a different sensation one experiences when his eyes first rest upon the "Lord of Waters," whose blue, foam-crested waves wash our western coast. Perhaps it is due to the ill-defined conception that pervades the soul of the vastness of the Pacific. Eighty millions of square miles—nearly half the surface of the globe—is covered by this illimitable, fathomless sea, which rolls in solemn majesty from

OTHER WONDERS

continent to continent and almost from pole to pole. If one knew nothing of all this, the Pacific might excite in him feelings no different from those aroused when gazing upon any other body of water extending beyond his ken; but who can behold the blue expanse of ocean that lies beyond the Golden Gate, and feel no thrill from the aweinspiring sense of inconceivable vastness?

The Sunset State is indeed an empire of itself, a wide domain of fruitful vales, of deadly deserts, of snow-clad peaks, of titanic forests, with pretty villages, great cities and thousands of pleasant resorts that fitly make it a nation's playground as well as a home for its own favored Long Beach, Santa Barbara, Santa people. Catalina, Riverside, Pasadena, and a score of other seaside and inland resort towns are famous, but to my mind the queen of them all is Monterey, with its never-to-be-forgotten Hotel Del Monte. Here indeed is the culmination of all the glorious color and languorous delights of the Golden State, a spot that may match Capri or Sorrento in their happiest moods. The lovely little bay, the beetling cliffs that overhang the deep blue waters, the great sprawling live oaks, the never-ending riot of roses, and all the odorous and beautiful California flowers, are only a

few of many things that charm the fortunate sojourner-doubly fortunate if he be domiciled at the Del Monte, which that experienced traveler, Dr. Muirhead, author of Baedeker's Guides for Great Britain and the United States, declares the best hotel on the American continent. By the "best," he no doubt meant the most comfortable and satisfactory, as well as the most delightfully situated, for it seems to me that these words best describe the service and surroundings of the Del Monte. Its gardens are a marvel even in California, the land of flowers—"a continual feast of color, solid acres of roses, violets, calla lilies, heliotrope, narcissus, tulips and crocuses, and one part, known as 'Arizona,' contains a wonderful collection of cacti." The grounds of the Del Monte reminded Dr. Muirhead of some of the splendid parks of the English gentry, save that England is no match for California in flowers. I refer to the Del Monte at this length since it is to some extent typical of many of the excellent hostelries of the coast, though my recollection is that there are but few that match it in the matter of moderate charges, excellence considered.

California has in her ruined missions and old Spanish traditions a touch of human antiq-

SAN GABRIEL MISSION, CALIFORNIA Courtesy Southern Pacific Railway



OTHER WONDERS

uity that lends an added charm to this enchanted land. The atmosphere of sacred romance that hovers around England's abbevs is not wanting in the moss-grown, vine-covered ruins that are found in so many delightful spots in the Sunset State. The story of the mission is a fascinating one, from its inception in zeal and poverty and rise to affluence to its decadence and final abandonment. The monk, always in the vanguard of Spanish exploration and settlement, came hither about the middle of the Eighteenth Century. The Franciscan order received a grant from the Spanish throne of a number of properties in southern California. The first mission was founded near San Diego in 1769 by Junipero Serra, a monk of true piety and energetic character. Others followed him and in all twentyone missions were established, extending along the Pacific from San Diego to San Francisco. All of these today are in ruins or have disappeared except four, which still survive under the control of the Catholic Church. The buildings were wonderfully well constructed, hard brick, hewn stone, tile roofs and heavy timbers being so carefully combined that they have well withstood the ravages of time, though no doubt the equable climate has also contributed to their 171

preservation. The old notion that the red man will not perform hard manual labor is contradicted here, for the work of building the missions was done by Indians under the direction of the monks-and hard work it was, for the stone had to be quarried and dressed, bricks moulded and burned, and the heavy timbers brought many miles, often on the men's shoulders. The savages were reduced to a state of peonage, though it seems that their masters' policy was generally one of kindness and there were but one or two instances where an uprising against the priests occurred. Taken altogether, there are few other known instances where white men had so little trouble with the natives with whom they came in contact. The priests not only looked after the religious instruction of their charges, but taught them to engage in agriculture and such crude manufactures as were possible under the primitive conditions that existed. In time the mission properties became enormously valuable. their revenues from different sources reaching as much as \$2,000,000 annually. But semi-civilization did not agree with the natives—it was the beginning of decadence among the Indian tribes that has rendered them practically extinct. The missions came to a sudden end when their prop-



CLOISTERS, CAPISTRANO MISSION, CALIFORNIA Courtesy Santa Fe Railway

OTHER WONDERS

erties were confiscated by the Mexican Government to recoup the depleted treasuries of Santa Ana in his struggles with the Texans and the United States. After the annexation of California the conditions were altogether unfavorable to the rehabilitation of the old regime, which rapidly faded into a romantic memory. Of the three or four missions which still survive. Santa Barbara is the largest and best preserved, and San Gabriel is perhaps the best known, being on the regular rounds of the numberless tourists who visit the City of Angels. At the latter one may see much of the old order of things, save that the confiding native no longer toils and worships in the sacred precincts. There are many curious paintings and relics and a vineyard famous even in a land of vineyards. San Diego, the oldest of all, and San Fernando, one of the most beautifully situated, will prove the most interesting of those which have fallen into ruin.

Like the English monks the Spanish padres, when locating their establishments, always selected sites with delightful surroundings and commanding views of beautiful scenery—always in the most fertile valleys and adjacent to lake or river. Many of the California missions are within a short distance of the Pacific, whose

dark blue waters are often visible through the arched cloisters, lending a crowning touch of beauty to the loveliness of the semi-tropical landscapes. And in sight of all of them, snow-capped mountains rear their majestic forms against a sky matched only by that of Italy itself. Fertile fields with flowers, fruit trees and palms, usually watered by irrigation as well as the winter rains, always surrounded the mission buildings, and, indeed, the Arcadia of the poets was well-nigh made a reality under the sway of the California padres.

But I need not pursue farther the neverending theme of the romance and loveliness of the Sunset State. The limit of my modest volume might easily be stretched into a whole library and much of the story still remain untold. Truly, the American citizen who has never seen California has missed the rarest of his country's charms.

In Arizona, aside from the Canyon region, there is much of weird beauty and interest. The great irrigation projects are constantly extending the habitable spots throughout the territory, and it takes but the magic touch of water to make this sun-blighted desert burst into bloom and fruitfulness. In the Salt River Valley, a

OTHER WONDERS

green oasis of some two thousand square miles, is situated Phoenix, the capital city, a pretty and progressive town which, with assured statehood, would seem to have an exceptional future. The Salt River Valley is a level plain, verdant with alfalfa fields, studded with palms and giant cottonwoods, and girt by distant mountains so blue and ethereal as to seem almost a part of cloudland itself. Rain seldom falls and all the year long the sun shines in its full glory on this pleasant vale in the desert. The summers are hot, it is true, but the monotony of continual sunshine is neutralized by the verdure and bloom that one sees always and everywhere.

In New Mexico there is also much to engage the attention of the observant traveler—far too much to admit even of mention in such a hurried outline as I am sketching. But one may not entirely pass over the old town of Santa Fe, which, strange to say, contests with St. Augustine for the honor of the oldest settlement of white man within the persent limits of the United States. It was in 1605—barely more than a century after the discovery by Columbus—that the gold-seeking cavaliers of Spain penetrated into the mountain fastness, far inland, and founded with great ceremony the preten-

175

THREE WONDERLANDS

tious "La Ciudad Real de la Santa Fe de San Francisco."—the true city of the holy faith of St. Francis. In its unbroken history of more than three hundred years, seventy-six Spanish rulers and twenty American governors have successively occupied the old palace—a long, one-story building with a square-pillared colonnade fronting on the plaza. It is indeed a historic structure, crowded with many priceless treasures relics of its former occupants. "There are faded pictures of saints painted upon puma skins; figures laboriously wrought in wood to shadow forth the Nazarene; votive offerings of silver brought to the altar of Our Lady by those who had been healed of disease; rude stone gods of the heathen, domestic utensils and implements of war. There, too, may be seen ancient maps of the new world on which California appears as an island in the Pacific and the country at large confidently set forth with like grotesque inaccuracy."

They will tell you that General Lew Wallace wrote the great American novel, "Ben Hur," in this old palace during the time he held the governorship of the territory, and while he is known to have done some work on the book in the



MT. RAINIER-TACOMA, REFLECTED IN SPANAWAY LAKE Courtesy Northern Pacific Railway



OTHER WONDERS

Orient, there seems to be no doubt but that it occupied much of the time he spent in Santa Fe.

One will find many other places of interest about the town—touches of that old-world antiquity and tradition that the average American town so sadly lacks confront the visitor everywhere. The sturdy little adobe church of San Minguel claims, perhaps justly, the distinction of being the oldest place of Christian worship within the present limits of the United States. stands in an aggregation of huts that crowd along the narrow winding lanes which serve as streets. It has been somewhat restored, it is true. but the walls, at least, are the same ones reared by the original builders. Near by is a humble adobe dwelling, still occupied, that the patriotic citizen will tell vou is the oldest house in the United States, having been in existence as early as 1540, when an Indian pueblo occupied the site of the present town. It is reputed that Coronado came hither in course of his wanderings and stopped for a time in this very hut, though of course the mythical element may have entered into this tradition. Be that as it may, old Santa Fe has so much of quaintness and so much of indisputable antiquity that no one who really desires to know the West can omit it from his itin-

THREE WONDERLANDS

erary. And added to these attractions it has a climate which for absence of extremes is perhaps unmatched in the entire country. Altogether, if Santa Fe were better known, the number of tourists who now visit the town would be multiplied manyfold.

In the great Northwest there is much to delight and interest. The Columbia is one of the most majestic of rivers and there are unequalled vistas along its valley which one need not leave the train to see. Especially delightful is the view from the great bridge near Portland, and one should be sure to take a daytime train when making this crossing. Portland is one of the most charming of the coast towns—the city of roses, as it is often styled from the almost yearlong profusion of bloom that encompasses nearly every private house. The climate here is never severe; being tempered by the great Japan current, it is in many respects similar to that of the If there is a little too much rain British Isles. at seasons to please everyone, it is atoned for by the profusion of bloom and verdure.

Seattle, which of late years has forged ahead of all her rivals and is threatening the supremacy of San Francisco itself, is still wrestling with the problems of rapid growth, and years will



SUNRISE ON RUINS AT CUERNAVACA, OLD MEXICO From the Original Painting by Thomas Moran, N. A.



OTHER WONDERS

doubtless elapse ere the crudeness and confusion which are evident in many places will disappear. But it is breezy, pushing, full of the spirit of progress, with an unmatched harbor, so deep that they can wash the hills into it with powerful hydraulic pressure, to save carting the dirt away—and it is needless to say that the future of the city is secure, whatever temporary reverses it may meet with. It is dominated from all points of view by the snow-capped summit of Mount Ranier, the loftiest peak in the coast country. Its slopes are clothed with dense green pine forests and its summits white with snow the whole year round. What an inspiration it must be to those who see it daily and have in their souls enough of the poetical to feel the majesty and beauty of this sublimest of mountain peaks; glowing in the amber hues of morning, shrouded in the amethystine haze of sunset, bald and awful in the noonday glare, it stands always the embodiment of all that is most impressive and lovely in natural scenery.

Old Mexico, which at the moment I write is involved in the throes of a revolutionary struggle, has been a favorite theme with our artist, and few will realize how deservedly its scenes have employed his brush save by a per-

THREE WONDERLANDS

sonal visit to this Egypt of the West. Here are relics of a civilization more ancient and advanced than may be found elsewhere in America—a barbarous civilization, perhaps, if the paradox may be allowed, but none the less of entrancing interest. One would hardly expect to find in the socalled New World a scene such as Mr. Moran portrays in the beautiful picture herewith, but this picturesque ruin is at Cuernavaca, a quaint old town near the capital city. The church dates from the time of Cortez and was built in anticipation that the capital city would extend towards it and encompass it, but this never occurred. The whole composition, in its languorous, romantic beauty, is more suggestive of Spain or Morocco than of America—the ruin against the glowing morning sky, the white-walled, many-towered town in the far distance, the stone arches of the bridge and the group of women in the foreground, all seem strangely out of harmony with our preconceived ideas of what we may find on our own continent. As it is only typical of many surprises that the tourist will find in our sister republic, which with restored tranquillity and a more stable and democratic government, is bound to become more than ever the goal of the intelligent traveler from the States.

THE END

Index

A

Absaroka Range, 24, 36. Adamana Station, 151. Amethyst Mountain, 35.

В

Bagby Dam, 99.
Beaver Lake, 44.
Ben Hur, 176.
Blackfeet Indians, 49.
Boulder Bed, 124.
Bradshaw Mountains, 164.
Bridal Veil Fall, 66, 97.
Bright Angel Amphitheatre, 164.
Bright Angel Inn, 123.
Bright Angel Trail, 119, 122, 130.
Buckskin Mountains, 164.
Bunnell, Dr., 103.
Bunsen, 18.

C

Calavaras Grove, 90-91. Canyon Hotel, 16. Canyon Diablo, 159. Canyon of the Colorado, 21, 113-165.

Canyon of the Rio Virgin, 138-141. Canyon of the Yellowstone. 28-32. Cathedral Rocks, 66. Cathedral Spires, 24. Clark, Galen, 88. Clouds Rest. 70. 78. Coconino Forest, 134, 165. 116-118, Colorado River. 122-123, 125, 127-128. 138-150. Colter, John, 49. Columbia River, 22, 178. Coronado, 133, 139, 177. Cortez, 139, 181. Crow Indians, 49. Crystal and Rainbow Forest. 152. . Cuernavaca, 180.

D

Dellenbaugh, Capt. Fred S., 143, 163.

Del Monte Hotel, 169.
Del Portal, 98.
Devils Corkscrew, 126.
Doane, Lieut. 49, 54.
Don Pedro del Tovar, 133.

INDEX

E

Eagle Peak, 78.
El Capitan, 66, 70, 78, 103.
El Portal, 62, 65, 83, 93-94, 97, 107.
El Tovar, 115-116, 123, 13 133-135.
Emerald Pool, 13.
Evarts, Mr., 55.
Excelsior Geyser, 19, 53.

F

Firehole River, 22, 53. Flagstaff, 151, 156, 163. Fort Yellowstone, 32, 38. Fountain Geyser, 53. Fountain Hotel, 16. Four Peaks, 164. Fra Marcos, 114.

G

Gardiner, 3-4, 6, 45.
Glacier Point Hotel, 75.
Glacier Point Trail, 69-79.
Golden Gate, 39.
Grand Canyon, 113-165.
Grizzly Giant, 85.
Green River, 140, 143.
Gulf of California, 144-145.

H

Half Dome, 69, 74, 78, 103. Happy Isles, 73. Harvey, Fred, 131, 134. Harvey Hotels, Fred, 114-115, 134. Hayden, Dr., 38. Heart Lake, 27.
Higgins, C. A., 153.
Hoodoos, The, 40.
Hopi House, 131-132.
Hopi Point, 120.
Humphreys Peak, 163.
Hurricane Mountains, 165.
Hutchings, A. C., 90-91, 105.

1

Indian Garden, 119, 125 Illilouette, Canyon, 75. Inspiration Point, 30, 95. Ives, Lieut., 140.

J

Jacob's Ladder, 129. Juniper Range, 165. Junipero Serra, 171.

K

Kaibab Plateau, 164. King's River Forest, 92. Kipling, Rudyard, 28.

L

Laguna, 160.
Lake Colonial Hotel, 15, 24.
Le Conte, Prof., 102.
Lewis and Clark Expedition, 49.
Lewis Lake, 27.
Liberty Cap, 74
Livingston, 6.
Lower Falls, 54.

M

Mammoth Hot Springs, 6. 16, 32, 38, 43, 55. Mariposa Grove, 64, 84-89, 107. Merced River, 65, 111. Merced River Canyon, 62, 98. Meteorite Mountain, 157. Mirror Lake, 61, 71, 78. Mogolion Plateau, 164. Mokis. 160. Monos, 105. Monterey, 169. Moran, Thos., 28, 31, 67, 135-137, 160. Morning-Glory Spring, 13. Mount Broderick, 74. Mount Ranier, 179. Mount Washburn, 32, 54. Mud Volcano, 53. Muir, John, 32, 85, 89, 96, 103, 152. Muirhead, Dr., 170.

N

Navajo Reservation, 164. Nevada Falls, 73, 74, 79. Norris Basin, 5, 14, 32. North Sigillaria Forest, 152.

O

Oak Creek Canyon, 165. Obsidian Cliff, 44. Old Faithful Geyser, 19. Old Faithful Inn, 10. Overhanging Rock, 76. P

Pacific Ocean, 168.
Painted Desert, 164.
Powell, Major John Wesley, 140.
Prismatic Lake, 53.

R

Raymond, 107. Redwood, 84, 89. Riverside Geyser, 23.

S

Salt Lake City, 3. San Diego, 171. San Francisco Peak, 165. San Gabriel, 173. San Joaquin Valley, 100. San Fernando, 173. San Miguel, 177. Santa Ana, 173. Santa Barbara, 173. Santa Fe, 176-178. Santa Fe Trail, 114. Seattle. 178. Sentinel Dome, 67. Sentinel Hotel, 67. Sentinel Rock, 66, 70. Sequoias, 84-92. Seven Cities of Cibola, 139, 160. Shiva Temple, 124. Shoshone Lake, 27, 40, 41. Sleeping Giant, 24. Stanton, Lieut. R. B., 145. Sulphur Mountain, 53.

INDEX

Sunset and Peachblow Craters, 165. Superstition Mountains, 164

T

Ten-ie-ya, Chief, 104. Tetons, The, 41. Three Forks, 52. Thumb Station, 5, 23. Toltec Gorge, 167. Tower Falls, 32, 36, 54. Twin Sisters, 152.

Upper Geyser Basin, 13, 22, 55.

V

Vado de los Padres, 140. Vernal Falls, 71, 73, 79, 102. Virgin River, 138.

W

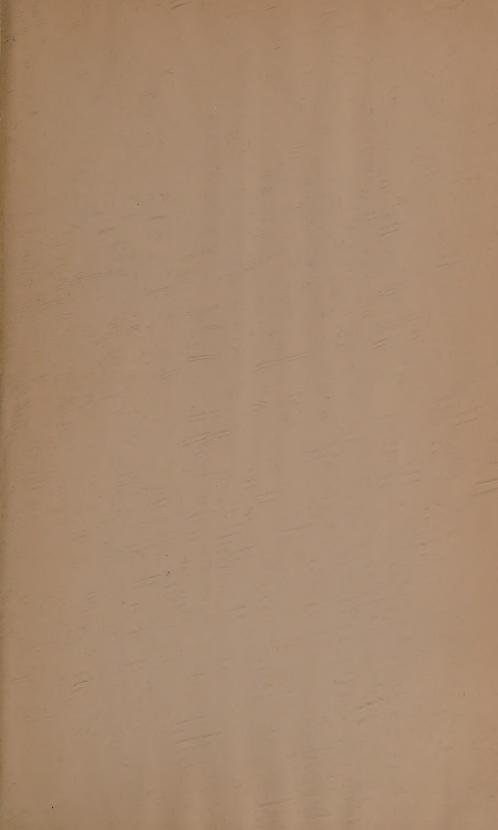
Wallace, General Lew, 176. Walnut Canyon, 155. Washburn, General, 54. Wawona, 69, 80, 84, 89, 107. Wylie Permanent Camps, 6.

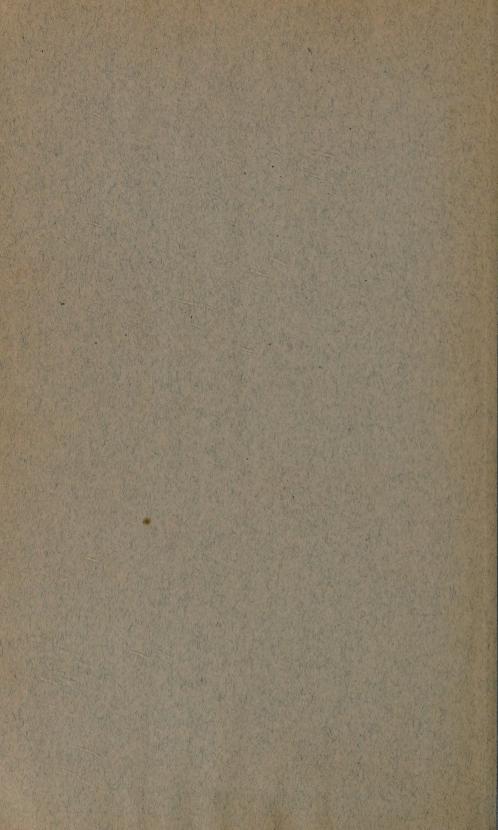
Y

Yellowstone Hotel, 3. Yellowstone Lake, 18, 23-26, 42, 46, 53. Yellowstone Park, 1-59. Yosemite Valley, 61-111. Yosemite Falls, 67, 78.

2

Zuni, 161.







Renewals: (800) 471-0991 www.santaclaracountylib.org

